

**EAST CONTRA COSTA
REGIONAL FEE AND FINANCING AUTHORITY**

Antioch – Brentwood – Contra Costa County – Oakley – Pittsburg

A JOINT EXERCISE OF POWERS AGENCY

255 Glacier Drive, Martinez, CA 94553

**Board of Directors
Meeting**

Thursday, June 9, 2016

6:30 p.m.

Tri-Delta Transit Meeting Room
801 Wilbur Avenue
Antioch, California

1. Call to Order
2. Public Comment
3. Consent Items
 - A. **APPROVE** minutes of the January 14, 2016 meeting (*February, March, April and May meetings cancelled*)
 - B. **APPROVE** the 2016/17 Work Plan and Budget.
 - C. **APPROVE** amendments to Consulting Services Agreements with the following consultants to extend the term of the existing agreements through the dates listed below with no other changes to the agreements; and **AUTHORIZE** the Secretary or designee to execute the amendments on behalf of the Authority (no attachment):
 1. Amendment to agreement with Woodruff Spradlin Smart for on-call legal services related to ECCRFFA Fee Program, to extend the termination date from June 30, 2016, to a new termination date of June 30, 2017.
 2. Amendment to agreement with Fehr and Peers for on-call support for fee evaluation and strategic planning, to extend the termination date from June 30, 2016, to June 30, 2017.
 - D. **APPROVE** the Second Amendment to Memorandum of Understanding between Contra Costa Transportation Authority and ECCRFFA for the Balfour Road Interchange (Phase I) project (substantially in the form attached) to contribute up to \$26 million in RTDIM fee revenues for the Project, including \$18 million for Project construction, through Fiscal Year 2017/2018; and **AUTHORIZE** the Secretary, or designee, to execute the Amendment on ECCRFFA's behalf.

Board of Directors:

Doug Hardcastle, City of Oakley - Chair
Mary N. Piepho, Contra Costa County – Vice Chair
Sal Evola, City of Pittsburg
Tony Tiscareno, City of Antioch
Robert Taylor, City of Brentwood

Authority Staff Office:

Contra Costa County
255 Glacier Drive
Martinez, CA 94553
(925)313-2000

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4. Determination Items
5. Boardmember Comments
6. Adjournment

DD:nw

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The Authority will provide reasonable accommodations for persons with disabilities planning to attend Board meetings who contact the Staff at least 24 hours before the meeting, at (925) 595-4587. Any disclosable public records related to an open session item on a regular meeting agenda and distributed by the East Contra Costa Regional Fee and Finance Authority to a majority of members of the Board of Directors less than 72 hours prior to that meeting are available for public inspection at 255 Glacier Drive, Martinez, CA during normal business hours.

Board of Directors:

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**EAST CONTRA COSTA
REGIONAL FEE AND FINANCING AUTHORITY**
Antioch - Brentwood - Pittsburg - Oakley and Contra Costa County

A JOINT EXERCISE OF POWERS AGENCY

MINUTES

January 14, 2016

The regular Board meeting of the EAST CONTRA COSTA REGIONAL FEE AND FINANCING AUTHORITY (ECCRFFA) was called to order in the Tri Delta Transit Board Room, 801 Wilbur Avenue, Antioch, California by Chair Robert (Bob) Taylor at 6:56 P.M.

ROLL CALL

PRESENT: Salvatore (Sal) Evola (Pittsburg), Tony Tiscareno (Antioch), Vice Chair Doug Hardcastle (Oakley), and Chair Robert (Bob) Taylor (Brentwood)

ABSENT: Mary N. Piepho (Contra Costa County Board of Supervisors)

STAFF: Dale Dennis, Program Manager

ELECTION OF OFFICERS

Chair

Director Evola nominated Doug Hardcastle to serve as the Chair of the Authority. Director Tiscareno seconded the nomination. There were no other nominations and the nominations were closed. **Doug Hardcastle** was elected to serve as the Chair of the East Contra Costa Regional Fee and Financing Authority for 2016, by the following vote:

AYES: Evola, Tiscareno, Hardcastle, Taylor
NOES: None
ABSTAIN: None
ABSENT: Piepho

Newly-elected Chair Hardcastle chaired the meeting at this time.

Vice Chair

Director Evola nominated Mary N. Piepho to serve as the Vice Chair of the Authority. Chair Hardcastle seconded the nomination. There were no other nominations and the nominations were closed. **Mary N. Piepho** was elected to serve as the Vice Chair of the East Contra Costa Regional Fee and Financing Authority for 2016, by the following vote:

AYES: Evola, Taylor, Tiscareno, Hardcastle
NOES: None
ABSTAIN: None
ABSENT: Piepho

PUBLIC COMMENT

There were no comments from the public.

CONSENT ITEMS

Before the consent items were approved, Program Manager Dale Dennis presented Item B.

Director Evola recognized that the approval of the Contribution Agreements would slightly delay the funding for the James Donlon Extension project but expressed his appreciation for regional cooperation on projects in East County.

On motion by Director Evola, seconded by Director Tiscareno, the Authority adopted the Consent Items by the following vote:

AYES: Evola, Taylor, Tiscareno, Hardcastle
NOES: None
ABSTAIN: None
ABSENT: Piepho

A. APPROVED Minutes of the December 11, 2014, and December 10, 2015 Meetings

B. THE AUTHORITY TOOK THE FOLLOWING ACTIONS:

1. APPROVED Amendment No. 1 to the Joint Exercise of Powers Agreement/Contribution Agreement between the Authority and Contra Costa County for the Reimburse County Prop 1B funds (Project #7), to increase the maximum reimbursement amount from \$3.0 million to \$3.35 million; and
2. APPROVED Amendment No. 1 to the Contribution Agreement between the Authority and the City of Brentwood for the John Muir Parkway Extension project (Project #8), to increase the maximum reimbursement amount from \$2.9 million to \$3.5353 million, plus interest.

DETERMINATIONS ITEMS

There were no Determination Items.

BOARDMEMBER COMMENTS

Director Evola noted that the City of Pittsburg had experienced a huge dissatisfaction from its residents to Caltrans' timing of metering lights, particularly those on San Marco Boulevard, where the queueing had created backups on local streets lengthening the commute. While he suggested there could be a benefit in the future with the longer commutes, he stated the shorter commutes were being negatively impacted. He urged support from the region to address that situation.

CORRESPONDENCE

There was no correspondence.

ADJOURNMENT

Chair Taylor adjourned the meeting of the East Contra Costa Regional Fee and Financing Authority at 7:05 P.M. to Thursday, February 11, 2016 at 6:30 P.M. or other day/time deemed appropriate by the Committee.

Respectfully submitted,

Anita L. Tucci-Smith
Minutes Clerk

**EAST CONTRA COSTA
REGIONAL FEE AND FINANCING AUTHORITY**

DATE: June 9, 2016

TO: Board of Directors

FROM: Dale Dennis, Program Manager



SUBJECT: Approve Work plan and Budget for FY 2016/17

Recommendation: **APPROVE** the FY2016/17 Work Plan and Budget.

Discussion:

Staff recommends that the Board approve the attached FY 2016/17 Work Plan and Budget. The primary focus for ECCRFFA in FY 2016/17 will be to complete SR4 Bypass Transfer and R/W closeout activities, as well as the delivery of the following high priority projects:

- Balfour Road Interchange – PS&E, Kinder Morgan Relocation, R/W Acquisition and Construction;
- eBART – Extension to Hillcrest Avenue – Construction, CM and Design Services During Construction.

The FY 2016/17 Budget includes unexpended programmed funds for years thru FY 2015/16, as well as programmed funds in FY 2016/17. The table below summarizes the remaining project related commitments beyond FY 2016/17 for ECCRFFA funding as reflected in the November 2015 ECCRFFA Strategic Plan (attached for reference).

ECCRFFA November 2015 Strategic Plan Project Related Commitments (beyond FY 2016/17)	Amount
eBART – Extension to Hillcrest Avenue	\$ 11.00M
Balfour Road Interchange	\$ 9.00M
Reimburse Contra Costa County Proposition 1B funds	\$ 3.35M
John Muir Parkway – Brentwood	\$ 3.57M
Old SR4 Relinquishment Costs	\$ 3.35M
Vasco Rd Safety Improvements (Alameda County) (Final Amount TBD due to Bid Savings)	\$ 3.00M
eBART – Extension Beyond Hillcrest Avenue	\$ 3.00M
James Donlon Extension Project	\$ 37.67M
TOTAL	\$ 73.94M

ACTION OF BOARD ON _____

APPROVED AS RECOMMENDED ____ **OTHER** ____

VOTE OF DIRECTORS

_____ **UNANIMOUS (ABSENT** _____ **)**

AYES: _____ **NOES:** _____

ABSENT: _____ **ABSTAIN:** _____

I hereby certify that this is a true and correct copy of an action taken and entered on the minutes of the Board of Directors on the date shown.

ATTESTED _____
Secretary to the Authority

Fiscal Year Budget

TOTAL (ECCRFFA, RTDIM and ECTIA) Estimated Available Funds at beginning of fiscal year	\$	31,600,000
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TOTAL ESTIMATED FUNDS AVAILABLE THROUGH 6/30/17	\$	44,710,500
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		FY Budget
1	ECCRFFA General	23,145,000
	Subtotal	\$ 23,145,000
3	State Route 4 Bypass Program	
A.	General	415,000
B.	Segment 1	0
C.	Segment 2	200,000
D.	Segment 3	13,125,000
	Subtotal	\$ 13,740,000
	TOTAL	\$36,885,000

TOTAL ESTIMATED REVENUES LESS EXPENDITURES	\$	7,825,500
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EAST CONTRA COSTA REGIONAL FEE AND FINANCING AUTHORITY

WORK PLAN AND BUDGET FOR FISCAL YEAR 2016/17

ECCRFFA Program - General Program No. 60730			
WORK ORDER	ITEM	Item Description	FY Budget
4085	Administration	Management of ECCRFFA program, including audit report .	200,000
4103	Strategic Planning	Preparation of planning document(s) using a combination of staff and consultant effort.	50,000
4401	Neroly Road Signal	Reimbursement to UPRR for Design, Engineering and Installation of Preemptive Signal at Neroly Road and Delta Deanza Trail	95,000
4498	BART: eBART extension to Hillcrest Ave	Fund a portion of the design and construction of the e-BART extension to Hillcrest Avenue as shown in the Third Amendment to the ECCRFFA JEPA approved by Board in September of last year.	22,800,000
ECCRFFA Program No. 60730 - General Subtotal			\$ 23,145,000

State Route 4 Bypass - General Program No. 60725			
WORK ORDER	ITEM		FY Budget
4409	Project Management / Admin.	Management of SR4BP Program. (Staff time, including audit, accounting, county counsel and administrative support)	200,000
4410	Risk Management	Maintain a risk management program. Budget includes payment of policy insurance premium for the SR4BPA for \$10M of coverage.	15,000
4414	SR4 Transfer and R/W Closeout	ROW staff and consultants will continue working with Caltrans on the completion and submittal of records and documents for the transfer of Bypass to Caltrans, complete and record Record of Survey and and R/W closeout. <i>(All consultant and staff time related to transfer budgeted here)</i> .	150,000
4444	Property Management & Maintenance	Property management activities related to SR4BPA parcels not transferred to Caltrans. Includes property at south end of Segment 2 in vicinity of Kinder Morgan, SW quadrant of Sand Creek IC area and others. Includes maintenance activities on an as-needed basis , including - debris removal, fence repair, and weed abatement. Also, ongoing DTSC review costs for former gun club property.	50,000
State Route 4 Bypass Program No. 60725 - General Subtotal			\$ 415,000

EAST CONTRA COSTA REGIONAL FEE AND FINANCING AUTHORITY WORK PLAN AND BUDGET FOR FISCAL YEAR 2016/17

State Route 4 Bypass: Segment 2 Program No. 60434			
WORK ORDER	ITEM		FY Budget
4432	Sand Creek Interchange Project	Includes PG&E relocation costs to temporarily relocate existing electrical facilities across the SR4Bypass at Sand Creek Road and to permanently relocate facilities once the Project is complete.	200,000
State Route 4 Bypass: Segment 2 - Program No. 60435 Subtotal			\$ 200,000

State Route 4 Bypass: Segment 3 Program No. 60436			
WORK ORDER	ITEM		FY Budget
4425, 4497	Balfour Road Design and Utility Relocation	CCTA is responsible for project for design, utility relocation and construction activities. SR4BA is responsible for R/W acquisition. Any ROW activities related to CCWD, will be reimbursed by CCWD.	13,000,000
4485	Riparian Mitigation	Budget amount includes cost of staff and consultant time to close out remaining permit conditions for the mitigation site, including payment to the CA Department of Fish and Wildlife as well as coordination with the City of Brentwood to take over maintenance of the riparian landscaping. Also includes estimated cost of endowment to city to fund maintenance activities in perpetuity	125,000
State Route 4 Bypass: Segment 3 - Program No. 60436 Subtotal			\$ 13,125,000

TOTAL EXPENDITURES			\$ 36,885,000
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2015 ECCRFFA STRATEGIC PLAN and CCTA MEASURE J FUNDING PLAN

\$ thousands

Year of Expenditure (YOE) Dollars

APPROVED 11/12/2015

		Prior Years								TOTAL	
		FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	Future	TOTAL		
REVENUE											
	ECCRIFA Fees Less Admin Costs (Revenue Projections based on base fee increases of SFR to Approx. \$17,649 plus escalation in 2017 and beyond)	\$12,006	\$13,103	\$14,301	\$14,587	\$14,879	\$15,176	\$151,000	\$235,052		
	Measure J Revenues (East County Share)	\$43,800	\$200	\$8,000	\$0	\$0	\$0	\$54,345	\$106,445		
EXPENDITURES (BY MEASURE J CATEGORY)											
Proj #		Prior Years	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	TOTAL		
	BART - East Contra Costa Rail Extension	\$1,200	\$10,800	\$12,000	\$11,000	\$0	\$0	\$0	\$35,000		
1	eBART - Extension to Hillcrest Avenue	\$900	\$0	\$2,100	\$0	\$0	\$0	\$0	\$2,900		
2	eBART - Railroad Avenue Station	\$0	\$0	\$0	\$0	\$3,000	\$0	\$0	\$3,000		
3	eBART - Extension Beyond Hillcrest Avenue	\$0	\$0	\$0	\$0	\$3,000	\$0	\$0	\$40,900		
	Subtotal	\$2,000	\$10,800	\$14,100	\$11,000	\$3,000	\$0	\$0	\$450		
4	East County Corridors - Vasco Rd, SR4 Bypass, Byron Highway, Non Freeway SR4	\$0	\$450	\$0	\$0	\$0	\$0	\$0	\$5,000		
4	Sand Creek Rd I/C	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$26,000		
5	Balfour Rd I/C - See Notes 1) and 2)	\$3,000	\$14,000	\$0	\$9,000	\$0	\$0	\$0	\$46,000		
5	Balfour Rd I/C - See Notes 1) and 2)	\$6,668	\$10,000	\$21,559	\$7,773	\$0	\$0	\$0	\$0		
6	SR4/SR160 Connector Ramps - Contingency + Accommodate BART	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,350		
7	Reimburse County Prop 1B	\$0	\$0	\$0	\$1,860	\$1,490	\$0	\$0	\$3,570		
8	John Muir Parkway (SR4 Bypass Related)	\$0	\$0	\$0	\$3,570	\$0	\$0	\$0	\$4,100		
9	Cost of Relinquishment Payments	\$750	\$0	\$0	\$3,350	\$0	\$0	\$0	\$3,000		
12	Vasco Rd Safety Improvements (Alameda County)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,645		
13	East County Corridors - Vasco Rd, SR4 Bypass, Byron Highway, Non Freeway SR4	\$15,418	\$24,450	\$21,559	\$18,633	\$11,410	\$0	\$11,645	\$103,115		
	Subtotal	\$15,418	\$24,450	\$21,559	\$18,633	\$11,410	\$0	\$11,645	\$2,000		
14	Bart Parking, Access and Other Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000		
	Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
15	Major Streets, Traffic Flow and Safety Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$37,672		
16	James Donlon Extension	\$0	\$0	\$0	\$177	\$14,878	\$15,177	\$7,440	\$19,400		
17	Major Streets, Traffic Flow and Safety Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$57,072		
	Subtotal	\$0	\$0	\$0	\$177	\$14,878	\$15,177	\$26,840	\$0		
	Transportation for Livable Communities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
18	Mokelumne River/Pedestrian Overcrossing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,600		
19	Transportation for Livable Communities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$17,600		
	Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,700		
20	Sub-Regional Transportation Needs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200		
21	ICM	\$0	\$0	\$200	\$0	\$0	\$0	\$0	\$3,900		
	Subtotal	\$0	\$0	\$200	\$0	\$0	\$0	\$0	\$224,587		
	TOTAL ALL PROJECTS	\$17,418	\$35,250	\$35,859	\$29,633	\$14,587	\$14,878	\$15,177	\$61,785		

ANNUAL ECCRFFA SHORTFALL (-) / SURPLUS (+)	(\$13,244)	\$1,103	(\$7,559)	(\$1)	\$1	(\$1)	\$143,560	\$143,809
CUMULATIVE ECCRFFA SHORTFALL (-) / SURPLUS (+)	\$20,700	\$7,456	\$8,559	\$1,000	\$1,000	\$1,000	\$144,559	

ANNUAL MEASURE J SHORTFALL (-) / SURPLUS (+)	\$31,332	(\$9,800)	(\$21,759)	\$227	\$0	\$0	\$0	\$0
CUMULATIVE MEASURE J SHORTFALL (-) / SURPLUS (+)	\$31,332	\$21,532	(\$227)	\$0	\$0	\$0	\$0	\$0

1) Balfour Road I/C - If CCTA is successful in securing a \$6M grant for the SR4 ICM project, \$2M of the Measure J funding will be transferred to the Balfour Road I/C project to act as a local match and \$2M in ECCRFFA funding will be transferred to the Balfour Road I/C project.

2) Balfour Road I/C - Any unexpended Measure J funds on SR4 East will first be used to address any eBART shortfall that may occur and second will be transferred to the Balfour Road I/C project, freeing up ECCRFFA funds, which will be reprogrammed to other ECCRFFA priority commitments/projects.

**EAST CONTRA COSTA
REGIONAL FEE AND AUTHORITY**

DATE: June 9, 2016

TO: Board of Directors

FROM: Dale Dennis, Program Manager



SUBJECT: Approve Second Amendment to MOU with CCTA for design of Balfour Road Interchange

Recommendation: **APPROVE** the Second Amendment to Memorandum of Understanding between Contra Costa Transportation Authority and ECCRFFA for the Balfour Road Interchange (Phase I) project (substantially in the form attached) to contribute up to \$26 million in RTDIM fee revenues for the Project, including \$18 million for Project construction, through Fiscal Year 2017/2018; and **AUTHORIZE** the Secretary, or designee, to execute the Amendment on ECCRFFA's behalf.

Background and Discussion:

In August 2012, the East Contra Costa Regional Fee and Financing Authority ("ECCRFFA") and Contra Costa Transportation Authority ("AUTHORITY") entered into Memorandum of Understanding CCTA Agreement 05E.07 ("Agreement"), to have CCTA to serve as the Project Sponsor for the SR4/Balfour Road Interchange Project (the "Project") and for ECCRFFA to fund up to \$8 million for project design, utility coordination and relocation, and project management services. In November 2012 the First Amendment to Memorandum of Understanding was approved to increase the maximum deductible for professional liability insurance from \$25,000 to \$50,000.

CCTA is currently completing the Final Design Phase. The Construction Phase of the Project will be starting soon. As such, ECCRFFA and CCTA need to amend the MOU again to provide for ECCRFFA funding for construction. ECCRFFA and TRANSPLAN approved a Strategic Plan that

ACTION OF BOARD ON _____

APPROVED AS RECOMMENDED ____ OTHER ____

VOTE OF DIRECTORS

_____ UNANIMOUS (ABSENT _____)

AYES: _____ NOES: _____

ABSENT: _____ ABSTAIN: _____

I hereby certify that this is a true and correct copy of an action taken and entered on the minutes of the Board of Directors on the date shown.

ATTESTED _____
Secretary to the Authority

provided \$26M for the Project, with \$18M programmed for the construction phase. The \$9M in ECCRFFA funds programmed in FY 2017/2018 for the Construction Phase was approved based on two important conditions. The first condition stipulates that if CCTA is successful in securing a \$6M grant for the SR4 ICM project, \$2M of Measure J funding will be transferred from the Balfour Road Interchange project to the SR4 ICM Project to act as a local match and \$2M in ECCRFFA funding will be reprogrammed to the Balfour Road Interchange project. The second condition stipulates that any unexpended Measure J funds on the SR4 East – Somersville to SR160 project will be used as follows: 1) first, to address any shortfall in the current eBART Extension to Hillcrest Avenue project that may occur; and 2) second, to fund the Balfour Road Interchange project, thereby freeing up ECCRFFA funds, which will be reprogrammed to other ECCRFFA priority commitments/projects.

There is also a provision in the Amendment No. 2 that addresses ECCRFFA funding limitations as follows:

SECTION III.A. in the Agreement is hereby amended, to read: "To reimburse the AUTHORITY up to the Reimbursement Limit (\$26 million) for the AUTHORITY'S cost to complete the WORK, in accordance with Exhibits B and C, attached hereto. Subject to that Reimbursement Limit and to the provisions of SECTION IV.D., upon receipt of an invoice from AUTHORITY in accordance with SECTION III.B., ECCRFFA shall reimburse the AUTHORITY the lesser of (a) the amount listed on the invoice, or (b) the amount of RTDIM revenues programed for the Project and available to ECCRFFA as of the date the invoice is submitted. If, as of the date that the AUTHORITY'S invoice is submitted, ECCRFFA does not have sufficient RTDIM revenues programmed by ECCRFFA for the Project to satisfy the entire amount of the invoice, ECCRFFA will reimburse the AUTHORITY in an amount equivalent to the then-current amount programmed by and available to ECCRFFA for the Project. ECCRFFA will reimburse the remaining amount to the AUTHORITY as soon as RTDIM revenues programmed for the Project become available to ECCRFFA in the future. If, for any reason, ECCRFFA's right to collect or expend RTDIM fees is terminated or suspended, in whole or in part, or the amount of RTDIM fees collected falls short of the projections in ECCRFFA's November 12, 2015 Strategic Plan, attached hereto as Exhibit D, ECCRFFA shall promptly notify AUTHORITY, and the Parties shall consult on a course of action that takes into consideration (a) ECCRFFA's lawful ability to collect and expend RTDIM fees for the purposes of this Agreement; and (b) ECCRFFA's outstanding agreements, contracts, and other prior obligations.";

At this point, staff is recommending the Board approve the attached Second Amendment to Memorandum of Understanding (MOU) between Contra Costa Transportation Authority and ECCRFFA for the Balfour Road Interchange (Phase I) project, substantially in the form attached.

SECOND AMENDMENT TO MEMORANDUM OF UNDERSTANDING
State Route 4/Balfour Road Interchange (Phase 1)
CCTA Agreement 05E.07

WHEREAS, the Contra Costa Transportation Authority ("AUTHORITY") and the East Contra Costa Regional Fee and Financing Authority ("ECCRFFA") entered into Memorandum of Understanding CCTA Agreement 05E.07 ("Agreement") on August 9, 2012, to fund up to \$8 million for project design, utility coordination and relocation, and project management in accordance with Exhibit B for the SR4/Balfour Road Interchange Project (the "Project"); and

WHEREAS, the "First Amendment to Memorandum of Understanding" was approved to increase the maximum deductible for professional liability insurance from \$25,000 to \$50,000; and

WHEREAS, the Parties now wish to include Project construction as part of the Agreement; and

WHEREAS, the ECCRFFA Strategic Plan, approved on November 12, 2015, programs \$26 million for the Project, which will be paid from RTDIM fee revenues that ECCRFFA collects.

NOW, THEREFORE, BE IT MUTUALLY AGREED that the Agreement is hereby amended, as follows:

- (1) RECITAL E. in the Agreement is hereby amended, to read: "Subject to the terms of this MOU, ECCRFFA will reimburse AUTHORITY for actual incurred expenses for certain design, utility coordination, and relocation (Kinder Morgan pump station), construction, and associated project management services for the Project (referred to herein as "the WORK")."; and
- (2) SECTION II.B. in the Agreement is hereby amended, to read: "To advance payment to consultants, utility companies, construction contractors, and other agencies in return for services rendered to complete the WORK in accordance with the "Work Plan and Budget" attached hereto as Exhibit B and the proposal by Quincy Engineering, Inc. entitled "Balfour Road/State Route 4 Bypass Interchange Improvements," attached hereto Exhibit C. AUTHORITY agrees to advance payment pursuant to this Section II.B. with the understanding that ECCRFFA will reimburse AUTHORITY up to \$26 million ("Reimbursement Limit") of total costs AUTHORITY incurs for the WORK, in accordance with the provisions of this Agreement;" and
- (3) SECTION II.C. in the Agreement is hereby amended, to read: "To include in the design, construction, and related contracts for the WORK provisions requiring the consultants, subconsultants, contractors, utility companies, and others to provide indemnification and insurance naming ECCRFFA and the State Route 4 Bypass Authority, their member agencies, officers, employees, agents, and representatives to the same extent as provided to AUTHORITY. The insurance shall include: (i) workers compensation insurance, as required by

state law; (ii) commercial general liability insurance with a combined, single-limit coverage of at least \$1 million and with contractual liability (or blanket contractual) coverage; and (iii) professional liability insurance with a maximum deductible of \$50,000.”; and

- (4) SECTION II.G. in the Agreement is hereby deleted and of no further force or effect; and
- (5) Add SECTION II.I. is hereby added to the Agreement, to read: “To advertise, award, and administer the construction contract for the Project.”; and
- (6) SECTION III.A. in the Agreement is hereby amended, to read: “To reimburse the AUTHORITY up to the Reimbursement Limit (\$26 million) for the AUTHORITY’S cost to complete the WORK, in accordance with Exhibits B and C, attached hereto. Subject to that Reimbursement Limit and to the provisions of SECTION IV.D., upon receipt of an invoice from AUTHORITY in accordance with SECTION III.B., ECCRFFA shall reimburse the AUTHORITY the lesser of (a) the amount listed on the invoice, or (b) the amount of RTDIM revenues programed for the Project and available to ECCRFFA as of the date the invoice is submitted. If, as of the date that the AUTHORITY’S invoice is submitted, ECCRFFA does not have sufficient RTDIM revenues programmed by ECCRFFA for the Project to satisfy the entire amount of the invoice, ECCRFFA will reimburse the AUTHORITY in an amount equivalent to the then-current amount programmed by and available to ECCRFFA for the Project. ECCRFFA will reimburse the remaining amount to the AUTHORITY as soon as RTDIM revenues programmed for the Project become available to ECCRFFA in the future. If, for any reason, ECCRFFA’s right to collect or expend RTDIM fees is terminated or suspended, in whole or in part, or the amount of RTDIM fees collected falls short of the projections in ECCRFFA’s November 12, 2015 Strategic Plan, attached hereto as Exhibit D, ECCRFFA shall promptly notify AUTHORITY, and the Parties shall consult on a course of action that takes into consideration (a) ECCRFFA’s lawful ability to collect and expend RTDIM fees for the purposes of this Agreement; and (b) ECCRFFA’s outstanding agreements, contracts, and other prior obligations.”; and
- (7) SECTION III.B. in the Agreement is hereby amended, to read: “Subject to SECTION III.A., above, ECCRFFA agrees to make payments to AUTHORITY within 30 working days after ECCRFFA’s receipt of an invoice prepared by AUTHORITY and submitted to ECCRFFA for payment. The payments by ECCRFFA shall be made from RTDIM revenues programmed for the Project, as set forth in Exhibit D. Each invoice must include sufficient information to enable ECCRFFA to confirm that the reimbursement request is for AUTHORITY’s payments for the WORK, as set forth in Exhibits B and C, attached hereto.”; and
- (8) SECTION IV.D in the Agreement is hereby amended, to read: “Notwithstanding anything to the contrary contained herein, the AUTHORITY shall expend all of its Measure J funds programmed for the Project before ECCRFFA is required to reimburse AUTHORITY for the \$9 million in RTDIM revenues that ECCRFFA programmed for the Project in Fiscal Year 2017/2018, as shown in Exhibit D. If the AUTHORITY has any unexpended Measure J funds that it programmed for the widening of SR4 East from Somersville Road to SR160 (“SR4 Funds”), the AUTHORITY’s Strategic Plan shall be amended to re-program such remaining funds as follows: (a) to first satisfy any of AUTHORITY’S funding shortfall for the eBART Project; and (b) any SR4 Funds

remaining after satisfying the shortfall in (a) shall be used to increase the amount of Measure J Funds AUTHORITY will program to complete the WORK for the Project. If AUTHORITY contributes any additional SR4 Funds to complete the WORK for the Project, the amount of RTDIM funds that ECCRFFA has programmed for the Project in FY 2017/18, as shown in Exhibit D, shall be reduced by a corresponding amount. The AUTHORITY and ECCRFFA shall return to their respective Boards, if necessary, to present an amendment of their respective Strategic Plans and this Agreement shall be amended to reflect the revised Measure J commitment and the ECCRFFA Reimbursement Limits to the Project; and

- (9) Exhibit B to the Agreement is hereby deleted in its entirety and replaced with new Exhibit B attached hereto.
- (10) Exhibit D (2015 ECCRFFA Strategic Plan and CCTA Measure J Funding Plan) attached hereto is hereby added as Exhibit D to the Agreement.
- (11) All other provisions of the Agreement, as previously amended, remain unchanged and in full force and effect.

In witness thereof, the parties hereto have executed this Amendment No. 2 to Memorandum of Understanding CCTA Agreement 05E.07 effective as of the 9th day of June, 2016.

EAST CONTRA COSTA REGIONAL FEE AND FINANCING AUTHORITY, a joint powers authority

By: _____
Secretary or Designee

CONTRA COSTA TRANSPORTATION AUTHORITY, a county transportation authority

By: _____
Dave E. Hudson, Chair

ATTEST:

Randell H. Iwasaki, Executive Director

Approved as to form:

Approved as to form:

Stephen Siptroth, Deputy County Counsel

Malathy Subramanian, Authority Counsel

Exhibit A

Balfour Road Interchange: The intersection of the SR4 Bypass and Balfour Road is currently a signal-controlled, at-grade intersection. The intersection is to be improved to an undercrossing interchange as a partial cloverleaf for both EB and WB traffic. The WB exit ramp is a single-lane diamond ramp that widens to three lanes at the Balfour Road intersection. The WB entrance ramp from EB Balfour Road is a one-lane loop. The WB entrance ramp from the WB Balfour Road is a one-lane diamond with an HOV bypass. The EB existing ramp is a single-lane diamond ramp that widens to three lanes at the Balfour Road intersection. The EB entrance ramp from WB Balfour Road is a one-lane loop. The EB entrance ramp from the EB Balfour Road is a one-lane diamond HOV bypass. All entrance ramps will be designed with ramp metering and CHP enforcement areas.

The interchange work also includes the relocation of the Kinder Morgan Pump station.

EXHIBIT B

ECCRFFA FUNDING WORK PLAN AND BUDGET

The following budget (by line item) shall apply to expenses for the WORK:

Project design by Quincy Engineering, Inc. and its subconsultants	\$3,349,000
Utility coordination with PG&E and relocation of Kinder Morgan pump station	\$4,422,400
Project management	\$228,600
<u>Construction</u>	<u>\$18,000,000</u>
Total	\$26,000,000

Balfour Road/State Route 4 Bypass Interchange Improvements

The Contra Costa Transportation Authority (AUTHORITY) is the transportation planning agency for Contra Costa County, responsible for prioritizing the county's share of federal, state and regional transportation funds. The AUTHORITY is responsible for ensuring the completion of a variety of projects, primarily on state highways. The proposed project, The State Route 4 Bypass is being developed directly by the AUTHORITY in coordination with the East Contra Costa Regional Fee and Financing Authority (ECCRFFA) and the State Route 4 Bypass Authority (SR4BA). The City of Brentwood is also a major stakeholder.

The principal source of revenue for the SR4 Bypass is from a regional transportation-funding agency, the ECCRFFA. This joint powers agency is comprised of the Cities of Antioch, Brentwood, Oakley and Pittsburg and Contra Costa County to administer the Transportation Fee program and funds many transportation projects, including the State Route 4 Bypass.

The State Route 4 Bypass (B) – Phase 1 project is a regional transportation project being constructed in segments. Segment 1 extends from just east of the SR4/Hillcrest Avenue Interchange to Lone Tree Way in the City of Antioch and will consist of a 6-lane freeway between existing SR4 and the Laurel Road Interchange and a 4-lane freeway from there to Lone Tree Way. Phase 1 of Segment 2 has been constructed as a 2-lane Expressway from Lone Tree Way to Balfour Road with the ultimate plan to convert it to a full freeway with interchanges at Sand Creek Road and Balfour Road. Segment 3 extends from Balfour Road south to Marsh Creek Road as a 2-lane Expressway, then along Marsh Creek Road (East-West Connector) as a 2-lane conventional highway, connecting to existing SR4 (Byron Highway).

The SR4BA has served as the California Environmental Quality Act lead agency for the route transfer, freeway designation route adoption and the relinquishment. In October 1993, the SR4BA released for public review the State Route 4 Bypass Road project Draft Environmental Impact Report (DEIR), and approved the project and certified the Environmental Impact Report (EIR) on December 13, 1994. Since that time eleven addenda and one supplemental EIR have been prepared and adopted by the SR4BA. The 1993 DEIR for the Bypass project, together with the 1994 EIR, the eleven addenda, and the supplemental EIR, now comprise the approved Final EIR (FEIR) and environmental record for the Bypass project. All impacts of the interchange were previously analyzed and disclosed in the 1994 EIR and the 2011 CEQA Addendum. We understand that the 1994 EIR included acquisition of right-of-way at the Balfour Road area sufficient to accommodate an interchange, including the utility facilities. The 2011 CEQA Addendum review detailed plans for the interchange against the 1994 EIR and concluded that neither new significant environmental effects nor any substantial increases in the severity of previously identified effects would occur.

Accordingly, as a final step to clear the project for federal funding, we anticipate that Caltrans Office of Local Assistance (OLA) will prepare a Categorical Exclusion (CE) to satisfy NEPA requirements. Caltrans will use the aforementioned CEQA documents in preparing the CE, but we anticipate they will require certain updated and/or additional technical information to supporting NEPA clearance.

The proposed work associated with this proposal will design the Phase 1 interchange improvements at SR4 at Balfour Road to conform to the planned configuration identified in Addendum #10 to the Environmental Impact Report for the SR4 Bypass Project. In addition, provide support for the issuance of a Categorical Exclusion (CE) to satisfy NEPA requirements.

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This Phase 1 project proposes to widen the State Route 4 Bypass and construct the grade separated Balfour Road Interchange with a Type L-7 configuration. The elements of the Phase 1 project are as follows:

- WB diamond exit ramp
- WB diamond entrance ramp for WB Balfour traffic along existing Bypass
- Reconstruct soundwall to the east along the future WB entrance ramp from Balfour Road
- WB loop entrance ramp for EB Balfour traffic
- EB diamond exit ramp
- EB loop entrance ramp with perpendicular connector to Balfour Road (phase 1 configuration)
- EB Bypass mainline lanes to serve two-way Bypass traffic
- EB Balfour Road undercrossing

The mainline improvements will match the SR4 at Sand Creek Road interchange improvements at approximately at centerline Station 275 and extend southerly to match the existing SR4 Bypass Road at approximately station 350. On Balfour Road, the roadway will be modified to accommodate on and off-ramp termini traffic signals and lighting.

The work will also involve the coordination for the relocation of the following major utilities:
PG&E Tower

- Kinder Morgan Pump Station
- Los Vaqueros Pipeline
- PG & E Power Transmission Tower

A later phase of this project will design the Phase 2 interchange improvements at SR4 at Balfour Road to conform to the planned Phase 2 configuration identified in Addendum #10 to the Environmental Impact Report for the SR4 Bypass Project. This project will modify the Phase 1 interchange improvements (this proposal) and construct the elements of the project as follows:

- Realign WB entrance ramp from WB Belfour Road
- Realign WB loop entrance from Balfour Road
- Remove Left turn lane for EB Balfour Road to EB loop entrance ramp
- Construct EB diagonal entrance ramp to serve EB Balfour Road traffic
- Construct WB Bypass mainline lanes
- Construct WB Balfour Undercrossing
- Construct new soundwall on mainline
- Realign Balfour Road as a 4-lane arterial with raised median, bike lanes and sidewalks
- Remove the existing dual left turn lanes at the Balfour Road / Bypass intersection and add dedicated right turn lanes for each of the EB and WB entrance ramps
- Construct a left turn lane for EB Balfour to EB Bypass

Much of the engineering studies and work efforts for the Phase 2 work will be completed in this Phase 1 proposal. For example, base surveys, geotechnical studies and master planning for the drainage and landscape will be completed in this phase. In order to assure there is a seamless and cost effective transition between the design and construction of Phases 1 and 2, QEI will develop Geometric Approval Drawings for the ultimate interchange at Balfour Road and the geometric plans for the selected Phase 1 alternative.

WORK PLAN

Preliminary Engineering And Environmental Clearance

Quincy Engineering, Inc. (QEI) personnel have provided project reports, environmental documents and plans, specifications, and estimates for a large number of transportation improvement projects throughout California. Therefore, we recognize and value the importance of maintaining close coordination and cooperation with the AUTHORITY throughout the project delivery process. With this in mind, we have developed an efficient project approach that incorporates these values throughout the project delivery process.

This scope of work includes the completion of Geometric Approval Drawings for the ultimate interchange at Balfour Road, engineering support to achieve environmental compliance, public outreach and completion of contract documents for the initial phase of construction. QEI has assumed for this scope of work that the AUTHORITY will advertise, award and administer the construction contract.

All Preliminary and Final Design tasks will be performed in accordance with:

- Caltrans Standards
- AUTHORITY Construction Standards or City of Brentwood Standards, if adopted, for facilities under local jurisdiction
- AASHTO Policy on Geometric Design of Streets and Highways for local facilities

The QEI design process is carried out under procedures that closely parallel those of local agencies and Caltrans.

QEI's scope of work for this project is as follows:

PHASE 100 - Project Management

Task 001 - Kick-Off Meeting

QEI will coordinate a kick-off meeting with the AUTHORITY, SR4BA Caltrans, City of Brentwood, the Team and any other project stakeholders the AUTHORITY would like to include. This meeting will result in an understanding amongst the QEI Team, the Cities, Caltrans and other project stakeholders as to the project scope, schedule, and budget. Major project issues that have already been identified by project stakeholders should be shared at this meeting as well.

Task 002 - Field Review

An initial field review with the AUTHORITY, SR4BA and City's Project Manager, the Environmental Manager, and Caltrans' Project Manager, QEI staff, and other project stakeholders will be held to review the proposed project to highlight and record significant project features. At this time, existing roadway features, such as existing pavement condition and condition of drainage facilities, will be reviewed for upgrades as needed.

QEI will obtain pertinent existing information from developers, local, state, and federal agencies including, but not limited to the City of Brentwood, Caltrans, SR4BA and AUTHORITY. This includes, but is not limited to existing right-of-way maps, available mapping showing roadway and topographic features, traffic data, roadway as-builts, existing drainage facilities with maintenance history, pavement conditions and recommendations for repair, and utility information within the project limits. QEI will also obtain pertinent existing information on

other planned projects by the Cities, County, and developers within the project limits to ensure scope compatibility and coordination.

Task 003 - Design Criteria Memorandum

QEI will develop a design criteria memorandum which will confirm Caltrans acceptance of the existing traffic forecasts and design period analysis previously completed. In addition the memorandum will also document the acceptable engineering platform to develop contract plans with (Micro Station or AutoCADD). QEI will complete Design Information Bulletin (DIB) 78 checklist and submit with the GAD package for approval. Comments received from reviews will be incorporated into the final design criteria memorandum. DIB 78 will serve as a tracking sheet for potential design exceptions and to initiate discussions with Caltrans reviewers to obtain buy in prior to submitting the GAD package for review and comment. QEI will meet with the Caltrans Design Coordinator and Design Reviewer to present the project and discuss any proposed non-standard features.

Task 004 - Project Management & Meetings

Project Development Team Meetings: QEI, with guidance from the AUTHORITY, will facilitate the formation of a Project Development Team (PDT) to be used as needed throughout the project delivery process. The PDT helps to create a smooth and expeditious project delivery process. The PDT expedites the process by bringing together project sponsors, stakeholders, and interdisciplinary technical experts at key points in the project delivery process to assure that decision makers are provided with the information needed to make decisions are made in a timely manner. The PDT would include representatives from the AUTHORITY, SR4BA, City of Brentwood, Caltrans, technical experts from the QEI team, and other parties the AUTHORITY believes could provide expertise and help expedite the process. This scope assumes that (24) PDT meetings will be conducted through the life of this project. The Project Manager and Project Engineer will attend all meetings, subconsultants will attend as needed.

QEI will prepare the meeting agendas in consultation with the AUTHORITY, distribute the agenda prior to the meeting date, arrange for appropriate participants to attend, and distribute meeting minutes to the participants within five days after meetings.

Project Status Reports: QEI will submit a Project Status Report each month in hard copy with our invoice. The Project Status Report will include the project schedule with tasks or activities in MS Project; progress of work; status of utility coordination and relocation work; updates to project schedule; information and decisions made; deliverables; problems encountered that may affect schedule, budget, work products with recommendations on mitigation; and anticipated work for the following month.

Project Schedule: We will develop a project schedule showing each task, start and end dates, and task duration. This schedule will be updated and coordinated with the AUTHORITY as appropriate. QEI will establish and maintain a project schedule to meet the AUTHORITY's project schedule. We will notify the AUTHORITY immediately of any problems that could adversely impact the schedule. To ensure the adherence to the schedule, it will be imperative that project reviews be performed by the AUTHORITY, City and Caltrans in a timely manner.

As a means of efficiency, our Team also utilizes the latest communication technology. Electronic copies of reports and plans can be forwarded from QEI to the AUTHORITY via e-mail, through our FTP site, and/or Internet access. QEI will provide general information regarding the project for media and public use. The information would all be screened and

EXHIBIT C - 6/26/2012



approved by the AUTHORITY and could include such general information as project cost, funding sources, construction schedule, and layouts.

Deliverables:

- **Kick-off Meeting**
- **Field Review**
- **Project Schedule**
- **Design Criteria Memorandum**
- **DIB 78**
- **PDT Meeting Agenda, Notes and Action Items**

PHASE 200 - Surveys and Mapping

Towill Inc. will provide Land Surveying and Mapping services in support of design services for the SR4 – Balfour Road Interchange Project. The Project includes approximately 2.0 miles of SR-4 and 3,500 lineal feet along Balfour Road and consists of:

- New bridge structure on SR4 at Balfour
- Construction of new on- and off-ramps
- Relocation of the Kinder Morgan pump station
- Relocation of a PG&E Electric Transmission Tower

Towill Inc., will perform field surveying to establish survey control, field utility surveys and cross section surveys on Balfour Road, selected as-built / conform surveys, as well as surveys to place the record SR4 right of way information on the project.

Towill will also provide digital mapping services to QEI resulting in the creation and delivery of digital files containing contours, spot elevations, planimetry and breaklines using the Caltrans ABC procedures. Planimetrics will be developed at a scale of 1"= 50' with a two-foot contour interval in a 1,000-foot-wide corridor centered on SR4. (Mapping limits will be extended to ensure sufficient coverage of adjacent areas of concern.) Anticipated accuracy is +/- 1.0' horizontally and +/- 0.25' vertically on well-defined points. Units of Measure shall be US Survey Feet.

Assumptions:

- If our record boundary retracement reveals significant discrepancies, we may be required by law to file a record of survey with the City/County/State to document these issues, which will require additional scope and budget to perform.

Task 001 - Ground Control Survey and Aerial Topographic Mapping

Project Survey Control: Project Survey Control will be established per Caltrans Standards sufficient to support the project through the duration of construction activities. Survey control monuments will be semi-permanent points, such as rebar and cap or survey marker discs set in concrete. Existing control monumentation will be utilized whenever possible if deemed of sufficient durability. The network shall consist of inter-visible points set at approximately 1,500 foot intervals that will allow use of a total station near the work area, and will be set in areas to allow the greatest safety and access while affording reasonable utility to the site. Survey Control may be set in areas within or outside of the controlled access area, depending on the current needs of the project, and may require densification by the contractor in some areas to serve for construction.

A project control diagram will be prepared to document the Project Survey Control values, type of monument and "to-reach" description, notes about the network observations and adjustment results as applicable. A Project Control Report will also be prepared to document the survey values, results and any unusual findings or notable items.

Project Control datums shall be referenced to the California Coordinate System of 1983, National Spatial Reference System of 2007, Zone 3 (CCS83, NSRS2007) Epoch 2011.0 and the North American Vertical Datum of 1988 (NAVD88), however verification of the desired survey control datums and monument values shall be accomplished with Caltrans prior to beginning work. It is assumed that Caltrans will provide reference survey control values and a brief description sufficient to allow us to locate the point in the field. Units of measure shall be the US Survey Foot.

Ground Control Photo Survey: Approximately fifteen horizontal and vertical ground control points will be established as necessary for photogrammetric mapping targets. Whenever possible, photo control point will be set with a semi-permanent monument, such as rebar with a cap, PK nail with a washer, survey spike, 1-1/8" brass disk with a painted or fabric target. On paved surfaces control targets will be painted with white latex paint. Plastic targets will be used on unpaved surfaces. In areas where we are unable to set monuments or place aerial targets, an existing feature will be utilized which will be identifiable in the imagery. This scope of work assumes that we will not be required to remove control targets following acquisition of the aerial photography.

Aerial Photography: Stereo aerial photography of the site will be accomplished using a precision, calibrated, cartographic camera equipped with a six-inch focal length lens and forward motion compensation (FMC) such as a Leica RC30. The photography will be taken at an altitude of 1,800 feet above the mean elevation of the terrain, resulting in an average scale of photography of 1:3600 (1"=300'). The photography will consist of three (3) lines with a total of eighteen (18) exposures and fifteen (15) stereo models.

Fully analytical aero-triangulation will be performed to extend the survey control across all aerial photographs.

Digital Planimetric/Topographic Mapping: A digital topographic map will be compiled at a scale of 1"=50' with a contour interval of two feet within the mapping limits defined as: approximately 2.0 miles of SR-4 and 3,500 lineal feet along Balfour Road. Data will be collected using a soft-copy stereoplotter interfaced directly with a CAD workstation. Aerial Mapping will conform to Caltrans Standards.

Breaklines and spot elevations will be digitized to create a digital terrain model (DTM). Contours will be generated from this DTM. Planimetric features – such as buildings, roads, fences, vegetation, and the like – will be digitized at elevations that provide the best horizontal accuracy (which may or may not be at ground level). Planimetric features digitized will be typical for a map scale of 1" = 50'. The DTM will be delivered in Caltrans CAiCE-SP10 Standards. As part of the DTM all the SRV files will be part of the Survey Segment Management Module, with each Topo Sheet having a separate SRD file associated with it. All Structure Surfaces and Roadway Surfaces will be separate surfaces.

All Microstation files will have standard Caltrans Legend and Key maps, as well as pertinent horizontal and vertical info as part of the file in the appropriate layer.

The Caltrans ABC process will be followed for approval of the aerial mapping. The "A" portion concerning datums, control layout, flight plan and neat models will be submitted for approval prior to flying the project. The "B" portion includes submittal of a GPS survey report, aerotriangulation bundle block adjustment report, exterior orientation files, two sets of contact prints, etc. will be submitted for approval prior to map compilation. The "C" process includes the submittal to Caltrans of digital mapping mapping files on CD, DVD or other electronic

storage media, and a digital photo index. Upon acceptance, the photo negatives will be submitted.

Digital Orthophotography: We will prepare natural color digital orthophotography of the project area at a scale of 1"=50' with a pixel ground resolution of 0.2 feet. The orthophoto limits shall coincide with the topographic mapping limits. In accordance with standard mapping practice, images will be rectified at ground level. Therefore, the top of above-ground features (rooftops, tops of trees, etc.) may not necessarily appear in their correct horizontal positions.

Task 002 Cross Sections and Utility Surveys

Cross Section Surveys: Cross sections will be surveyed at 50 foot intervals measured longitudinally along the alignment for approximately 3,300 lineal feet along Balfour Road. Sections will extend perpendicular to the alignment to the apparent road right of way.

Utility Surveys: Towill will coordinate our surveys with an underground utility locator if desired, to include location of potholes in our utility survey effort. Utility and pothole information will be included in the aerial topographic mapping per Caltrans standards. Towill and QEI will verify the Standards prior to sending mapping.

Towill will locate and identify surface visible evidence of existing utilities along Balfour Road and within the mapping limits on SR4. Any utility location within the travelled way of SR4 will require traffic control permits and/or traffic control plans, that will be submitted for approval. Utilities to be located include storm and sewer manholes, catch basins, drain inlets, culvert openings and outfalls, cleanouts, water appurtenances, gas, electric, and communication handholes, valves and vaults, and other unknown utility structures. At gravity drainage features, an 8.5" x 11" dip sheet will be prepared to document the structure type, pipe direction, size and invert depth. Dip sheet information will be reduced in a Microsoft Excel file, include photos of the facility and elevations recorded on the dip sheet.

Overhead Utilities: At the PG&E Tower to be relocated we will survey position and elevation of the tower legs only. We assume PG&E will perform catenary surveys and locate adjacent towers as needed for design.

Power poles will be located and overhead connections will be shown, however line voltages, number of conductors, etc. will be provided by the utilities. We will gather information about lowest conductor elevations, and in the case of a joint pole, lowest wire. We will record the pole number if available.

Kinder Morgan Pipelines: We will locate and identify survey evidence of Kinder Morgan pipelines in the area, to the extent possible for surface markings and indications of the pipeline, such as pipeline markers / paddle markers and surface valve structures. We will obtain as-built plans from Kinder Morgan and attempt to show underground connections, using the plans and available information.

Utility survey information will be shown in the electronic CAD mapping using unique symbology for each utility item and be identified by the survey point ID number. At pothole locations, we will annotate the CAD mapping with a survey point id number and the pothole number designation.

Conform Surveys: We will perform field surveys to locate and measure critical conform locations and elevations, at features such as curbs, walks, edge of road, edge of traveled way and other critical existing features. Conform survey information will be incorporated into the drawing. Conform surveys will be intensified and measured as three cross sections at 20 foot

intervals the north and south ends of the project on SR4. Cross section information will be incorporated into the drawing as spot elevations. Towill and QEI will meet to determine details of the actual items at each bridge and conform areas to be surveyed. It is assumed that Mark Thomas will provide the finish grade surface of the Sand Creek project so that more detailed conform surveys will not be required. If there are changes to the Sand Creek grades and finished surface additional design level conform surveys may be required.

Deliverables:

- **One Survey Control Diagram in Microstation V8**
- **One Project Survey Control report including ground (photo) control coordinates and brief descriptions of the points. The summary will include references to fixed reference monumentation.**
- **Three sets 9"x9" aerial photo contact prints**
- **One aerial photo index map sheet**
- **Aero-triangulation report**
- **MicroStation* V8 DGN file containing the topographic mapping**
- **MicroStation* V8 DGN file containing DTM source data features**
- **MicroStation* InRoads DTM file containing the terrain surface**
- **CAICE* DTM using Caltrans SP10 Standards**
- **Checkplots, Reports, electronic files, photonegatives etc, as per the Caltrans ABC process**
- **One (1) set of GeoTIFF image files with corresponding TFW files on CD-ROM.**
- **One MrSID orthophoto mosaic**
- **Conform and utility survey reference survey information will be incorporated into the CAD mapping**
- **(10) Utility potholes (survey component)**
- **One set of drainage structure "dipsheets"**
- **One Microsoft Excel spreadsheet with dipsheet information**

*Note that Caltrans is migrating from Microstation / CAICE to AutoCAD Civil 3D beginning in June of 2013. Our scope and fee assumes electronic deliverables will be in the current format as of the execution date of this scope.

PHASE 300 - Environmental Coordination

Based on our recent conversations, we understand that plans for the interchange remain consistent with those examined in previous CEQA documents. All impacts of the interchange were previously analyzed and disclosed in the 1994 EIR and the 2011 CEQA Addendum. We understand that the 1994 EIR included acquisition of right-of-way at the Balfour Road area sufficient to accommodate an interchange, with the exception of the utility facilities. The 2011 CEQA Addendum review detailed plans for the interchange against the 1994 EIR and concluded that neither new significant environmental effects nor any substantial increases in the severity of previously identified effects would occur.

Accordingly, as a final step to clear the project for federal funding, we anticipate that Caltrans Office of Local Assistance (OLA) will prepare a Categorical Exclusion (CE) to satisfy NEPA requirements. Caltrans will use the aforementioned CEQA documents in preparing the CE, but we anticipate they will require certain updated and/or additional technical information to supporting NEPA clearance. Our scope of work encompasses updates to the following reports to support the NEPA clearance process:

- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse Gases
- Noise

We note that the Initial Site Assessment prepared for the last CEQA Addendum (Geocon, November 2008) included a Caltrans ISA Checklist. We assume that Caltrans will accept this previous work and that no update or revision to the hazardous materials investigation is warranted.

Task 001 - Caltrans Coordination

Following authorization, we propose a meeting with appropriate Caltrans OLA staff. The purpose of this meeting will be to review previous environmental documentation for SR 4 project and Balfour Road interchange and confirm the extent of technical studies needed to support the anticipated NEPA CE. Following this meeting, it may be necessary to refine our scope to reflect Caltrans' direction. This task also includes an allowance for us to continue coordination with Caltrans throughout the preparation, review, and acceptance of the technical studies outlined below.

Task 002 - Prepare Supportive Technical Studies

Circlepoint's technical subconsultants (Illingworth & Rodkin, RCL Ecology, and William Self Associates) would complete the following:

Air Quality and GHG Analysis: Emissions from traffic would affect regional and local air quality. Since the region is a nonattainment area for ground level ozone and fine particulate matter and a maintenance area for carbon monoxide, an air quality analysis is required to show conformity with federally adopted plans. In addition, changes in mobile air toxic emissions need to be assessed. Emissions from traffic in the region make up a substantial portion of the greenhouse gas emissions inventory. These emissions cumulatively could have a small but incremental effect on global climate change.

An evaluation of project effects on these emissions would be assessed and would include the following tasks:

- **Evaluate Conformity.** The State Implementation Plan (SIP) conformity requirements will be determined for the project and suitable conformity language will be developed for the air quality analysis. This will include consultation with MTC, AUTHORITY, and Caltrans regarding project inclusion in the latest transportation plans and programs.
- **Complete Air Quality Checklist Evaluation.** The Department's Air Quality Checklist Evaluation will be prepared and submitted to the department with the Air Quality Conformity Analysis Report.
- **Prepare Air Quality Technical Report.** An air quality technical report will be prepared using the Department's current guidelines and requirements, as well as local CEQA criteria. This report will include a Hot Spot carbon monoxide analysis based on the protocol developed by UC Davis. Hot Spot locations will include receptors nearest the freeway and selected intersections. A discussion regarding mobile source air toxics (MSAT) and particulate matter (PM10 and PM2.5) will also be included in the report. A description of the climate change effect associated with the project in accordance with the Department's current annotated guidelines for an EA/IS document will be provided as part of the air quality analysis. Both changes to traffic volume and traffic speed affect greenhouse gas emissions from traffic. Project and no project emissions will be compared and evaluated based on current state and local guidance. The effect of transportation control measures in reducing project emissions will also be described.

Biological Resources: RCL Ecology previously prepared a Biological Resource Assessment for the Balfour Interchange. As two years have passed since that work, RCL recommends

preparation of an up to date special-status plant survey report. Spring/summer blooming plants with potential to occur in the plan area can be surveyed until the end of June.

RCL will fold together the results of the new plant survey along with the previous Biological Resources Assessment in the format of a Caltrans Natural Environment Study (NES) so that the combined report will conform to both NEPA and CEQA requirements. As this previous Biological Resource Assessment resulted in minor environmental impacts, RCL will follow the Caltrans NES outline for minimal impacts (January 7, 2005 version).

Cultural Resources

Archival and Records Research: As part of the update to WSA's 2007 letter report entitled Archaeological Survey and Cultural Resources Assessment of Additional ROW for SR-4 Bypass at the Intersection of Balfour Road and SR-4, Brentwood, Contra Costa County, California (project report), WSA will consult with the California Historical Resources Information System (CHRIS), Northwestern Information Center (NWIC) at Sonoma State University to conduct a record search of the proposed project area. The purpose of the records search will be to determine if any new archaeological studies have been conducted or new sites discovered in the records search area since the May 10, 2007 records search WSA conducted on behalf of the project.

The search will cover the entire 27-acre project area and a minimum one-quarter mile radius adjacent thereto. As part of the records search request, WSA will provide the NWIC with a copy of the map included in the results of the 2007 records search, and will request that only information filed with the NWIC since May 7, 2007 be included in the new records search. WSA will request that only information on cultural resource surveys, historic or prehistoric archaeological sites, and listed or eligible National Register of Historic Places or California Register of Historic Resources properties recorded since May 10, 2007 within the area of the record search be provided. Copies of applicable site records and survey reports will be made as necessary, and site locations will be plotted on the USGS topo quad. State and local historic site inventories will also be reviewed to identify the presence of any listed sites in the project vicinity.

Native American Heritage Commission Consultation: Although the Native American Heritage Commission (NAHC) in Sacramento was consulted in 2007 as part of the original Balfour Road/SR-4 project, the individual tribal members on the list of local, interested Native American representatives provided by the NWIC were not contacted. As a result, WSA will again contact the NWIC by letter with a description of the proposed project and a request to review their Sacred Lands file for information on traditional or cultural lands within the project area and vicinity, and to provide a current listing of local, interested Native American representatives. WSA will contact the individuals or tribal members on the contact list via certified letter and will provide a description of the project and a project area map. Input and comment will be solicited regarding individual knowledge about sacred sites or traditional lands within the project area. If responses to the letter solicitations are not provided within two weeks of their delivery, WSA will place a maximum of two follow-up phone calls to each non-respondent. A table indicating the results of contact and comments will be prepared and inserted into the update to the project report.

Addendum to the Cultural Resource Letter Report: WSA will prepare an addendum to the 2007 Archaeological Survey and Cultural Resources Assessment of Additional ROW for SR-4 Bypass at the Intersection of Balfour Road and SR-4, Brentwood, Contra Costa County, California that

will include a discussion of the results of the new record and literature search and the results of the NWIC consultation.

Noise Analysis: Illingworth & Rodkin completed ambient noise measurements and traffic noise modeling for the project in 2011. Assuming that the project has remained largely unchanged, the results of this earlier work will be summarized in a Noise Study Report (NSR), suitable for submission to Caltrans.

- **Noise Study Report.** A traffic noise study report would be completed in accordance with the Traffic Noise Analysis Protocol developed by Caltrans. The protocol requires identification of noise impacts at different types of activity areas affected by the project (primarily residential and recreational uses). The noise study would address both the State and Federal noise abatement criteria. The NSR would include the following sections:
 - Introduction
 - Project Description (provided by the Engineer)
 - Fundamentals of Traffic Noise
 - Federal and State Standards and Policies
 - Study Methods and Procedures
 - Existing Noise Environment
 - Future Noise Environment, Impacts, and Considered Abatement
 - Construction Noise
 - References

The report will provide tables, figures, and graphs showing the results of the study; recommended sound wall locations will be shown on maps; and the corresponding number of residential units achieving 5 dBA or more noise reduction will be determined.

Responses to Comments: We will respond to your comments on the Administrative Draft NSR and prepare a Draft NSR for Caltrans review. Responses to Caltrans comments will be prepared and submitted in the Final NSR.

Deliverables:

- **APE Exhibit**
- **Air Quality Technical Report**
- **Special-Status Plant Survey Report**
- **Addendum to the Cultural Resource Letter Report**
- **Noise Study Report**
- **Engineering Exhibits for the Environmental Documents**

PHASE 400 - Coordination with Others

Task 001 – Preliminary Utility Coordination

QEI will identify and coordinate with all utility companies or agencies operating utility facilities that may be impacted by the project.

Contact List: Beginning with any pre-existing utility contact list maintained by the local agencies, QEI will develop and refine a project-specific contact list containing all utility owners providing or proposing to provide service in the project area.

Utility 'A' Letters: QEI will send the following materials to all utility companies serving the project area: A vicinity map capturing the boundaries of the project and a **AUTHORITY-**approved letter requesting as-built or record information of the location, size and depth (if

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applicable) of each utility company's facilities within the study boundaries. Information regarding planned utility construction that might affect the project also will be requested.

Update Base Mapping: Based on the information received from the 'A' letters and the results of the field surveys and potholing (if needed), QEI will update the base mapping to reflect the existing utilities in the project area.

There are several utilities that are in conflict with the interchange and will be relocated by others. These are:

- The Pacific Gas & Electric (PG&E) overhead line that runs along the eastern side of the Bypass will require relocation of one (or more) of the towers from its current location to a new location approximately 400 feet to the north.
- The Los Vaqueros pipeline that crosses the Bypass ROW in the vicinity of Balfour Road. By agreement, the Contra Costa Water District agreed to realign and reconstruct the pipeline at no expense to the SR4BPA, provided construction of the interchange is started by June 22, 2015, and
- A Kinder Morgan Petroleum pipeline and pump station located on the northwest corner of Balfour Road /SR 4 Bypass intersection. This facility will be relocated approximately 400 feet to the west.

It is our understanding that these relocations will be addressed separately from the interchange project as part of utility relocation agreements to be accomplished by the owner and that these facilities must remain in operation during relocation. QEI has assumed that the design of the relocations will be done by the utility companies and will coordinate with these utility owners and our design will reflect these relocated facilities.

Task 002 - Coordination with Federal, State and Other Agencies

This task provides for the coordination meetings that may be needed for the review of environmental issues (or permit applications) with State and Federal Resource Agencies. It is assumed that CirclePoint will set-up and lead the meetings.

Task 003 - Coordination with Utilities

This task provides for coordination with utilities that are concurrently preparing or planning for work that may be impacted by this project. QEI will also prepare a Report of Investigation (ROI) as required by Caltrans. Once the ROI's have been approved, Quincy will work with AUTHORITY to issue the Notice to Owners and finalize the Utility Relocation Agreements.

Task 004 - One-on-One Property Owner Meetings

Quincy's Project Manager and the AUTHORITY's Project Manager would meet with up to five (5) times with property owners to discuss the proposed project and potential impacts to their properties. These meetings would be timed in advance of the Public Meetings so as to diffuse any potential controversy.

Deliverables:

- **Utility Coordination Meetings (12)**
- **Utility A Letters**
- **Update Utility Information on Base Mapping**
- **Coordination with Developers**
- **Property Owner Meetings**

PHASE 500 - Engineering Studies and Reports

The QEI Team will prepare engineering studies needed for the Project. It is assumed there will be the need for a Supplemental Project Report.

Task 001 – Drainage Report

WRECO will document the drainage design for the proposed Project. WRECO will perform drainage design calculations based on the drainage improvement recommendations from QEI related to the proposed Project. The calculations will include the runoff spread calculations, drainage pipe/culvert system calculations, roadside ditches, major cross culverts for Deer Creek and Dry Creek. WRECO will prepare a Drainage Report that will meet the requirements of Caltrans District 4, Office of Hydraulics. WRECO will also address review comments from Caltrans on the Drainage Report.

Task 002 - Storm Water Data Report

WRECO will prepare a Storm Water Data Report summarizing the Project impacts to water quality, general mitigation measures, and BMPs recommended by QEI. The study will address only the impacts from roadway improvements, utilizing Caltrans standard checklists. WRECO will also document the need for erosion control measures, hydromodification mitigation and BMPs to adhere to the Construction General Permit (CGP) in the report. The report will document the needs of both Caltrans and the Regional Water Quality Control Board for the proposed Project. WRECO will prepare the Storm Water Data Report that will meet the requirements of Caltrans District 4, Office of Water Quality. WRECO will also address review comments from Caltrans on the Storm Water Data Report.

Task 003 - Hydromodification Mitigation Plan

WRECO will prepare design details to address the need for hydromodification mitigation. The mitigation measures will be presented in the Drainage Detail sheets. WRECO assumes that there will be two (2) to four (4) Drainage Detail sheets. WRECO will also prepare relevant specifications and cost estimates. The design calculations will be performed in a HSPF base computer model, and the design approach and results from the analysis will be documented in the Storm Water Data Report.

With the need of a 401 Certification from the Regional Water Quality Control Board, the Project will require mitigation for hydromodification. WRECO will prepare two (2) to four (4) Drainage Detail sheets to cover the design of the hydromodification mitigation. The discussions and design calculations for hydromodification will be included in the Storm Water Data Report.

Task 004 - Geotechnical Design and Materials Report

Parikh Consultants, Inc. will prepare a Geotechnical Design and Materials Report for the Phase 1 project.

Research and Data Collection: Review of additional available geologic and soil literature in the vicinity of the site including review of any as-built drawings and existing LOTB.

Permits/USA Clearances: Comply with Agency Permit requirements. Assumed that Caltrans and any private encroachment permits will be provided by the Agency. Assumed that these are all public (Caltrans) ROW and therefore Contra Costa Environmental Health does not require any drilling permit. This scope has allowed a contingency in the event one parcel is in private ownership. Field locate the borings and call for USA clearance.

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Field Exploration: Because of the high costs associated with performing field borings we will plan the borings in a judicious manner at locations that make most logical sense. The boring program is provided in the table below.

PROJECT ELEMENT	NUMBER OF BORINGS	APPROXIMATE DEPTHS
ROUTE 4		
ROADWAY PAVEMENT (2 MILES)	16	5'
RETAINING WALL (ASSUMED 1,800')	6*	30'
SOUND WALL (ASSUMED 3,000')	6*	25'
RAMPS	4	40'
OVERHEAD (2 ASSUMED)	2	30'
BALFOUR		
APPROACH	6	5'
RAMPS (PHASE 1 & PHASE 2)	12	40'
TOTAL GDMR EXPLORATIONS	34	5'- 40'

Since Preliminary Design Layout and other design information are not available, it is assumed that there could be retaining walls up to 1,800' in length and soundwall up to 3,000' in length. These walls are assumed to be Caltrans Standard walls from 8' to 10' in height. Taller walls may require deeper borings. The borings for the Retaining walls are generally spaced at 300' and for the soundwalls are spaced at 500' intervals. These explorations and the budgets can be adjusted based upon the preliminary plans.

In addition, the boring data collected from the proposed bridge structures will also be used for this study. These explorations will provide an evaluation of subsurface conditions for the proposed roadway portion of the project. The boring locations will depend upon the available access and any boring data from previous studies. We anticipate using a truck mounted drill rig for our work. Some traffic control is assumed at this time in areas where necessary.

Classify and continuously log subsurface soil conditions encountered in each test boring at the time of drilling. Obtain "relatively undisturbed" and bulk samples of substrata from test borings. The borings will be drilled and capped in accordance with the permit requirements. Generally, the borings are required to be backfilled with cement grout.

Laboratory Testing: Perform laboratory tests on representative soil samples such as moisture density, unconfined compression, gradation analyses, corrosion tests, R-value tests, and Plasticity Index test, as necessary.

Soils Analysis/Evaluation: Perform engineering analyses and develop design recommendations for the proposed pavement and foundation design. Slope stability and settlement evaluation of proposed embankments, retaining walls, and soundwalls will also be considered in the GDMR.

Prepare Draft Geotechnical Design and Materials Report: Prepare preliminary recommendations for pipe culverts, embankments, overhead sign structure, sound walls, retaining wall, and pavement design.

Prepare Final Geotechnical Design and Materials Report: Prepare detail report including design recommendations for embankment foundation, retaining wall, sound wall, and pavement sections. Also specified in the report will be information on recommended slopes, groundwater

conditions, corrosion evaluations, etc. Using the general plan as a base map, we will provide boring logs in LOTB format.

Task 005 Bridge Foundation Report

Parikh Consultants, Inc. will prepare a Bridge Foundation Report for the Phase 1 project.

Research and Data Collection: Review of readily available geologic and soil literature in the vicinity of the site including any existing as-built LOTB.

Permits/USA Clearances: Comply with Agency Permit requirements. Assist the team in preparing for and applying for the permits.

Field Exploration: For the one bridge structure, drill 2 borings up to 100' in depth. These explorations will provide an evaluation of subsurface soils/rock conditions for the proposed structure.

The boring locations will depend upon the available access and the boring data from previous studies. This scope anticipates using a truck mounted drill rig for our work. Cuttings will be disposed off the shoulder areas on-site. Limited traffic control is anticipated at this time.

Classify and continuously log subsurface soil conditions encountered in each test boring at the time of drilling. Obtain "relatively undisturbed" and bulk samples of substrata from test borings. The borings will be drilled and capped in accordance with the permit requirements.

Laboratory Testing: Perform laboratory tests on representative soil samples such as moisture density, unconfined compression, gradation analyses, corrosion tests and Plasticity Index test, as necessary.

Soils Analysis/Evaluation: Perform engineering analyses and develop design recommendations for the proposed foundations. PCC piles are considered as the preferred pile option. Caltrans design guidelines will be used in the analyses of the foundation for the structure.

Prepare Draft Foundation Report: Prepare preliminary recommendations for foundations. Update the Type Selection Memo with the LOTB for the structure. Attend a Bridge Type selection meeting, if needed.

Prepare Final Foundation Report: Prepare detail report including design recommendations for foundation type and footing elevations lateral design capacities, incorporate potential scour data in the design, and pile foundation recommendations.

Discuss seismic considerations, evaluate the liquefaction potential and comment on the site soil conditions from this standpoint. Information related to Caltrans Seismic design criteria (SDC v 1.6) and 2010 updates shall be provided. Information related to the recently revised Seismic design guidelines and the ARS curves (2009) will be provided.

Task 006 - Landscape Architecture Concept Plan

Gates and Associates will create an Illustrative Landscape Plan, showing general concept of landscape architectural design and development for the Interchange. The plan will include the master irrigation strategy for the complete project and phase construction and preliminary plant material selections. Gates will coordinate storm water treatment with landscape plan and planting concepts. Plans to be prepared at a scale appropriate for public viewing will include:

- Planting Concepts proposed, with color rendered Conceptual Planting Plans
- Conceptual Planting Plans to include proposed plant material, sight distance and other setbacks

- Cross-sections included to visualize concepts

State standards for the level of landscape treatment for the appropriate year per hectare, including a three-year plant establishment period, will be used.

Task 007 - Structures Type Selection Report

QEI will prepare a Type Selection Report for the undercrossing and the culvert extension (described below). The Type Selection Reports will contain a General Plan, a General Plan Estimate and a Foundation Plan for each alternative along with a memorandum addressing geotechnical, hydraulic, aesthetic, environmental and cost issues. A structures type recommendation will be included in the report. It is assumed no more than two alternatives will be investigated at each structure. A General Plan of the Retaining Wall will be prepared. The structures are described as follows:

- **Balfour Road Undercrossing** – This is assumed to be a single span, cast-in-place, post-tensioned, concrete box girder bridge approximately 120 feet long by 55 feet wide.
- **Deer Creek Box Culvert Extension** – The existing culvert is assumed to be a two cell, 6' X 6' reinforced concrete box culvert. It assumed to be extended 50 feet to the east and 300 feet to the south.
- **Retaining Wall/Soundwall** - This is assumed to be a Caltrans Standard Plan Type 1 Retaining wall with soundwall on top for approximately 1,000 feet long.

Upon receiving approval from AUTHORITY on the Type Selection Reports, QEI will submit the reports to Caltrans in order to schedule a Type Selection Meeting. QEI will present each structure at a Type selection Meeting. After receiving all comments from the meeting, QEI will revise the General Plans and General Plan Estimates.

Task 008 - Right-of-Way Data Sheet

QEI will prepare preliminary layout plans for each viable alternative showing anticipated limits of right-of-way acquisition, temporary construction easements, and permanent easements, and showing utility relocation needs. ARWS Field Services, Inc. will develop Right-of-Way Data Sheets to estimate right-of-way and utility relocation costs and the anticipated right-of-way acquisition schedule for inclusion in the Project Report. This scope assumes up to three Right-of-Way Data Sheets will be prepared.

Task 009 - Utility Relocation Study

QEI will prepare mapping to show all anticipated utility conflicts, develop a cost estimate for relocation in the Right-of-Way Data sheet and recommend a schedule for utility relocation prior to construction. There may be some cases where relocation prior to construction is not feasible. In these cases, utilities could be relocated during construction by the contractor or through a coordination clause in the construction contract.

Task 010 - Prepare Fact Sheets for Exceptions to Design Standards

QEI will prepare any Fact Sheets for Exceptions to Design Standards identified during this preliminary phase.

Task 011 – Prepare Supplemental Project Report

QEI will prepare a Supplemental Project Report with the NEPA environmental document as an authorizing document augmenting the approved Project Report as the result of any change in project scope.

Deliverables:

- **Drainage Report (35%, 65%, 95% and 100% PS&E Submittals)**
- **Storm Water Data Report (35%, 65%, 95% and 100% PS&E Submittals)**
- **Hydromodification Mitigation PS&E (65%, 95% and 100% PS&E Submittals)**
- **Draft and Final Geotechnical Design and Materials Report**
- **Draft and Final Foundation Report**
- **Type selection Report**
- **Revised General Plans**
- **Revised General Plan Estimates**
- **Landscape Architecture Concept Plan**
- **Right-of-Way Data Sheets**
- **Utility Relocation Study**
- **Design Exception Fact Sheets**
- **Supplemental Project Report**

PHASE 600 - Public Outreach

Because this project is so well received and anticipated by citizens of Brentwood, the public outreach program will not be intensive. However, we believe in the need to communicate and inform the public during the design reconstruction phase of the Balfour Road/State Route 4 and associated improvements project. Specific components of the public outreach program for Balfour Road/State Route 4 Improvements include the following:

CirclePoint will plan, notice, and help facilitate a community meeting in the Summerset neighborhood near the interchange site. The plan will be to hold this meeting sometime between obtaining geometric approval (30% design) and the 65% design package submittal. Our team will work closely with the AUTHORITY to coordinate the appropriate timing. We anticipate that the meeting will enable members of the Summerset community to talk directly to Caltrans representatives to learn more about the project and its potential effects.

Our specific tasks will include:

- **Develop/Refine Mailing List**
- **Draft and Distribute Meeting Notice:** Either a postcard or 1 page letter is assumed to up to 500 addresses in the Summerset community.
- **Prepare Meeting Materials:** Agenda, comment cards, brief overview presentation
- **Meeting facilitation assistance**

We assume that the meeting can be held at the Summerset community clubhouse; we have included in our budget a small allowance for room rental and refreshments.

QEI will prepare engineering exhibits for one public community meeting. The exhibits will convey to the public the major features of the project and the approximate limits of the area impacted by the proposed construction. Exhibits will include a conceptual striping layout superimposed on an aerial photograph at a scale of 1:500 or larger, typical cross-sections for various segments of the roadway showing existing and proposed widths, and artist renderings of the completed project conditions.

QEI will assist the CirclePoint in preparing and identifying additional engineering exhibits for technical studies, exhibits for the environmental document prepared by CirclePoint, and other necessary documents, as needed, on the proposed improvements. It is assumed that all engineering exhibits will be traditional plans, profiles, and cross-sections and this scope does not include artist's renderings. If renderings are needed, they can be provided on a time and materials basis.

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The QEI Project Manager and Project Engineer will attend one public meeting during the design process. The Team will prepare technical information and plans for the AUTHORITY's use and present the technical aspects of the project and/or provide technical support to the AUTHORITY as needed. A summary of the meeting will be provided.

Deliverables:

- **Meeting Summary**
- **Engineering Exhibits for Public Community Meeting**

PHASE 700 - Prepare Geometric Plans

QEI will develop Geometric Approval Drawings (35% plans) for the ultimate interchange at Balfour Road and the geometric plans for the selected Phase 1 alternative to be submitted to the AUTHORITY, City and Caltrans for approval of the project's geometric features.

This scope assumes refinement of the alternative shown in Addendum #10 to the Environmental Impact Report for the SR4 Bypass Project and assumes one round of comments to be addressed in the final GAD submittal. This scope includes one coordination meeting to discuss the comments on the draft GAD submittal.

QEI will submit the Design Information Bulletin (DIB) 78 checklist developed in a previous task with the GAD package for approval. Comments received from reviews will be incorporated into the final GADs and DIB 78. QEI will meet with the Caltrans Design Coordinator and Design Reviewer to present the project and discuss any proposed non-standard features to comply with the Caltrans Highway Design Manual section 503.2.

The GAD package will include:

- Horizontal alignments
- Vertical alignments of Balfour Road, frontage roads, and ramps
- Typical cross-sections
- Design vehicle turning templates at intersections
- Sight Diagrams for each intersection

Deliverables:

- **Geometric Approval Drawings for Ultimate and Phase 1 Projects**
- **Meeting with Caltrans Reviewers**

PHASE 800 - Prepare Preliminary Cost Estimates

QEI will prepare an itemized preliminary cost estimate for construction. QEI will develop a preliminary cost estimate for the Phase 1 and Phase 2 Projects. Construction items (including supplemental work), quantities, unit prices, subtotals, and contingencies will be listed on the estimate.

Deliverables:

- **Preliminary Cost estimate Phase 1 Project**
- **Preliminary Cost estimate Phase 2 Project**

FINAL DESIGN PHASE

PHASE 900 - Prepare Final Engineering Reports

Task 001 - Prepare Traffic Management Plan

QEI, in conjunction with AUTHORITY, the City of Brentwood, and Caltrans will develop the Traffic Management Plan for the project. The plan documents what specific measures will be required to reduce impacts to traffic and notes the costs of implementation. It will include lane closure charts (specific hours during the day and/or night when traffic lanes can be closed). It also notes specific traffic control devices that can be used to improve traffic flow and safety through the work zone such as press releases to communicate upcoming lane closures

Task 002 - Update Other Engineering Reports (If Needed)

If new information is discovered that significantly changes the results of engineering reports completed during the Project Report stage, these reports will be updated.

Deliverables:

- Final Engineering Reports

PHASE 1000 - Prepare Plans, Specifications, and Estimate

QEI will prepare and submit 65%, 95%, and 100% Plans, Specifications, and Estimate. This scope allows for one Project Development Team meeting after both the 65% and 95% submittals. QEI will prepare the submittals according to the Caltrans standards.

PHASE 1000.1 - Prepare 65% Plans, Specifications, and Estimate

Task 001 - Prepare Draft Plans (Roadway 65%)

QEI will prepare draft roadway contract plans. We anticipate that the following types of plan sheets will be needed for each segment. (The anticipated number of plan sheets for each type is shown in parentheses.)

Balfour Road/SR4 Interchange Reconstruction	
▪	Title Sheet (1)
▪	Key Map & Line Index (1)
▪	Legends & Abbreviations (1)
▪	Typical Cross Sections (15)
▪	Layouts (7)
▪	Profile and Superelevation (15)
▪	Construction Details (25)
▪	Contour Grading Plan (7)
▪	Drainage Plans, Profile and Details (20)
▪	Drainage Quantities (2)
▪	Utility Plans and Details (8)
▪	Stage Construction, Traffic Handling Plans, and Detours (40)
▪	Construction Area Signs (1)
▪	Pavement Delineation & Sign Plans (25)
▪	Overhead Sign Plans and Details (10)
▪	Summary of Quantities (4)
▪	Soundwall Plans & Details (7)
▪	Planting and Irrigation Plans and Details (20) - Gates
▪	Signal, Lighting and Electrical Systems Plans and Details (34) – Fehr & Peers
▪	Temporary Water Pollution Control (2)
▪	Erosion Control Plans, Details & Quantities (10)
Total Roadway Plans (255)	

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Prepare Ramp Meter, Traffic Signal, Interconnect and Lighting Plans

Fehr & Peers will develop the 35% electrical base sheets showing the location of existing equipment, proposed improvements and develop a preliminary cost estimate. Fehr & Peers will prepare 65%, 95% and 100% PS&E and attend up to five (5) meetings for the State Route 4/Balfour Road Interchange. Comments received from each submittal will be addressed in a comment resolution table and incorporated into the PS&E. Fehr & Peers will perform the tasks necessary to prepare the electrical plans, specifications and engineer's cost estimate as defined below:

Balfour Road Interchange – Phase 1

- Ramp metering system including supporting queue and count loops for:
 - SR 4 northbound on-ramp from Balfour Road
 - SR 4 southbound on-ramp from Balfour Road
- Signal Removal at:
 - Balfour Road/State Route 4
- New Signals at:
 - Balfour Road/SR 4 northbound ramps
 - Balfour Road/SR 4 southbound ramps
- Signal Interconnect:
 - Balfour Road between Eagle Rock Way/Cortona Way and Summerset Drive
- Roadway Lighting:
 - Balfour Road between Eagle Rock Way/Cortona Way and Summerset Drive
- Freeway Lighting:
 - SR 4 northbound on-ramp from Balfour Road
 - SR 4 northbound off-ramp to Balfour Road
 - SR 4 southbound on-ramp from Balfour Road
 - SR 4 southbound off-ramp to Balfour Road
- Sign Illumination
 - Overhead signs on SR 4 at northbound and southbound Balfour Road off-ramps
- Temporary Traffic Signals - Assume one location, 2 stages for SR 4/ Balfour Interchange

Electrical and Telephone Service: Fehr & Peers will prepare electrical load calculations and submit them with applications to the utility company to verify service point locations and capabilities. Identify telephone service drop locations in coordination with the telephone company, if required. Any connection or application fees shall be paid for by the AUTHORITY.

Local Street Lighting: Fehr & Peers will conduct a roadway lighting photometric analysis for the City's preferred light and fixture type to ensure adequate lighting along Balfour Road.

Special Provisions: Fehr & Peers will prepare draft technical special provisions for each project element as noted above per Caltrans' standards and guidelines referencing its applicable Standard Specifications.

Construction Cost Estimate: Fehr & Peers will prepare a preliminary estimate of construction costs for each element in our scope of work per Caltrans' bid item list, this information will be combined into the engineers estimate by QEI.

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Bidding Support: Fehr & Peers will be available to respond to contractor questions during the bidding process.

Assumptions:

It is assumed that there will be up to 2-stages required to construct the median bent of the undercrossing. Local street lighting analysis includes 2-dimensional photometric analysis while 3-dimensional lighting simulations are excluded.

Prepare Planting, Irrigation Plans, and Soundwall Aesthetic Treatment Plans

Gates and Associates will prepare 65%, 95% and 100% PS&E for landscaping and irrigation elements and attend up to four (4) meetings for the State Route 4/Balfour Road Interchange Project. Planting plans will include irrigation requirements, plant locations, species, and verified quantities as well as callouts including mulch, seeding, and other materials and a plant list with symbols and notes.

This PS&E will be a separate stand-alone project that would be advertised after the Phase 1 project is constructed.

Task 002 – Prepare Draft Plans (Structures 65%)

QEI will design the structures using Load Resistance Factor Design following AASHTO LRFD Bridge Specifications, 2012 Edition with the California Amendments. For seismic design, Caltrans Seismic Design Criteria (Version 1.6) will be followed. Other references that QEI will follow are Caltrans Division of Structures “Bridge Memo to Designers”, “Bridge Design Aids”, “Bridge Design Details” and the “Office of Specially Funded Projects Information and Procedure Guide”.

We anticipate the following sheets will be required:

Balfour Road UC	
SHEET TITLE	NO.
General Plan	1
Deck Contours	1
Foundation Plan	1
Abutment Layout	1
Abutment Details	1
Typical Section	1
Girder Layout	1
Girder Reinforcement	1
Aesthetic Details	1
Structure Approach	2
Log of Test Borings	3
Total=	14

Deer Cr. Culvert Extension	
SHEET TITLE	NO.
General Plan	1
Foundation Plan	1
RCB Details	2
Wingwall details	2
Log of Test Borings	1
Total=	7
Balfour Road Retaining Wall	
SHEET TITLE	NO.
General Plan	1
Foundation Plan	1
Retaining wall Details	1
Aesthetic Details	1

Task 003 - Prepare and Submit 65% Draft Plans (Roadway and Structures)

QEI will prepare and submit 65% Plans, Quantities, and Estimate to the AUTHORITY, City and Caltrans for review and comment. This scope allows a Project Development Team Meeting to be held after the review period to expedite the comment period and to assist in the communication within the Team.

Task 004 - Prepare Special Provisions

QEI will prepare contract technical specifications to be submitted at the 95% and 100% submittals. The technical specifications will be based on the Caltrans Standard Specifications and Special Provisions.

The technical specifications will be submitted with the plans to the AUTHORITY, City and Caltrans according to the AUTHORITY's submittal process. It is our understanding that AUTHORITY will advertise, award, and administer the construction contract. QEI will merge Caltrans boilerplate specifications with the technical specifications.

Task 005 - Prepare Quantities and Estimate

QEI will prepare cost estimates for the proposed project at 65%, 95%, and 100% submittals. Quantities will be developed in accordance with standard Caltrans pay items. Caltrans Construction Cost Database or other databases as directed by AUTHORITY and the City, will be used to estimate item prices. Project estimates will show individual pay items, quantities, and costs as well as a project cost summary, including appropriate supplemental work items and contingencies.

Deliverables:

- **Ten (10) sets of 11"x17" plans (roadway and structures)**
- **Ten (10) copies of draft special provisions**
- **Ten (10) copies of engineer's estimate**
- **Two (2) copies of quantity calculations**
- **Memo to Specifications Engineer - 2 copies to Caltrans**

PHASE 1000.2 – Prepare 95% Plans, Specifications, and Estimate

Task 001 - Independent Design Check

An independent check of each structure design will be performed at this stage. The bridge plans will be reviewed for completeness, constructability, and conformance to design criteria. This involves a completely independent analysis of the project using the unchecked bridge detailed plans and 65% roadway plans by an engineer that has not been intimately involved in the design. This is a big part of the QEI QA/QC Plan and is identical to the Caltrans/Local Agency process. Based upon the independent check and agreement to revisions by the checker and designer, the plans will be revised as appropriate.

Task 002 - Quality Assurance/Quality Control and Constructability Review

As an integral part of the QEI QA/QC Program, a senior level engineer will review the entire draft PS&E (95% PS&E) package for uniformity, compatibility, and constructability. The review will include comparing structure plans with the roadway plans for conflicts or inconsistencies, and to ensure that the final design is in accordance with all environmental documents, permit requirements, hydraulics reports, and foundation recommendations. The specifications and estimate will be reviewed for consistency with the plans, and to ensure that each construction item has an associated pay clause.

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QEI also has an in-house Construction Management Group. They will perform a Constructability Review of the plans and specifications.

Task 003 - Submit 95% Draft Plans, Specifications, and Estimate

QEI will revise the 65% plans based on comments received. We will then prepare and submit 95% plans, specifications, and estimate. After the QA/QC and constructability reviews have been completed and the comments have been incorporated, the Draft PS&E along with design, check, and quantity calculations will be submitted to AUTHORITY and Caltrans for their review. QEI will conduct a Draft PS&E adjudication meeting to review the submittal with the PDT. QEI will incorporate the review comments into the final 100% PS&E submittal and provide a summary of responses to the comments. After comments are received, a 100% (final) set of plans, specifications, and estimate will be prepared. It is anticipated that QEI will attend the Caltrans Safety Review and Constructability Review meetings. Comments from these meetings will also be addressed in the 100% plans. QEI will also present the project to Caltrans District 4 Management as directed by the AUTHORITY.

Deliverables:

- **Response to Comments From 65% PS&E Review**
- **Safety Review Response to Comments**
- **Constructability Review Response to Comments**
- **Ten (10) sets of 11"x17" plans (roadway and structures)**
- **Ten (10) copies of draft special provisions**
- **Ten (10) copies of engineer's estimate**
- **One copy of design calculations (structures only)**
- **One copy of independent design calculations check (structures only)**
- **Two (2) copies of quantity calculations**
- **Memo to Specifications Engineer - 2 copies to Caltrans**
- **Project Presentation to Caltrans Management Team**

PHASE 1000.3 – Prepare 100% Plans, Specifications, and Estimate

Task 001 - 100% Final Plans, Specifications, and Estimate Submittal

This phase incorporates comments from draft PS&E and produces final PS&E ready for advertisement. Upon receiving comments from the AUTHORITY, City, Caltrans, and other stakeholders, each comment will be reviewed, discussed and addressed in writing. All apparent conflicts will be resolved in person or via telephone/ fax as necessary.

The QEI team will finalize roadway and structure plan sheets, special provisions, and cost estimate based upon response to meaningful comments received from the Draft PS&E submittals.

Task 002 - Prepare Construction Schedule

QEI will prepare a construction schedule to estimate the number of working days to be included in the construction contract. The schedule will be done using Microsoft Project, unless the AUTHORITY prefers another format. The schedule will also be provided to the Resident Engineer for their use during construction.

Task 003 - Prepare Resident Engineer's File

QEI will prepare the Resident Engineer's File. Included in this file will be any notes from the designer regarding unusual or unique items and any other information that the Resident Engineer should be made aware.

Task 004 - Prepare Surveyor's File

QEI will prepare the Surveyor's File including copies of all survey staking notes for both finished sub-grade and final roadway grade, and copies of alignments and calculations.

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Deliverables:

- Response to Comments From 95% Review
- Ten (10) sets of 11"x17" plans (roadway and structures)
- Ten (10) copies of materials handout information
- Ten (10) copies of draft special provisions
- Ten (10) copies of engineer's estimate
- Cross-sections at 50-foot intervals
- Roadway earthwork calculations
- Construction Schedule
- Five (5) copies of Resident Engineer File
- Five (5) copies of the Surveyor's File

PHASE 1100 - Obtain Permits

RCL Ecology will assist in obtaining the following permits discussed below. Some permit applications require filing fees; all such fees are assumed to be covered by the lead agency or their agent and are not included in this cost estimate.

Habitat Conservation Plan (HCP Permit): This permit fulfills the requirements of both the federal and State Endangered Species Acts using standard techniques for evaluating and mitigating project effects on listed species. The process consists of a field survey and preparation of the HCP Planning Survey Report and obtaining HCP staff review and approval. HCP staff then prepares the Participating Special Entity Agreement for signature by the Implementing entity and the HCP governing board. The implementing entity (project lead agency) pays required fees (for development and wetlands) and agrees to follow the avoidance, mitigation, and monitoring plan for the species involved during project construction.

USACE 404 Permit (fill of waters): This permit allows the fill of the daylighted portion of Deer Creek in the northern quadrant of the project area and a smaller section downstream. The task is to prepare the 404 application and submit to the USACE with the preliminary wetland delineation, and then to coordinate with the USACE and the HCP staff to obtain the USACE Regional Permit under the joint agency agreement to allowing mitigation through payment of the HCP wetland fee. There is no fee for review of the application.

RWQCB 401 Permit (water quality certification): This application includes submittal of the project storm water management plan showing how project runoff volume will not exceed preconstruction flows as well as the methods that will be used to filter runoff before it leaves the site using various best management practices (BMPs).

This cost estimate does not include the application review fee of \$944 nor any additional fees that will be determined based on project size.

CDFG Streambed Alteration Agreement (Deer Creek piping): The piping of Deer Creek requires an application to CDFG for impact to the Creek as well as the riparian trees. The application/permit fee (not included in this cost estimated) will be based on the estimated cost of the Creek piping portion of the project. CDFG usually also requires mitigation for the loss of riparian trees.

Deliverables:

- HCP Planning Survey Report
- Participating Special Entity Agreement for HCP
- USACE 404 Permit Application Package
- RWQCB 401 Permit Application Package
- CDFG 1602 Permit Application Package

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PHASE 1200 - Right-of-Way Appraisal and Acquisition

Task 001 - Prepare Right-of-Way Maps and Legal Descriptions

QEI will utilize research including record documents, title documents, and record maps to show right of way boundary lines and adjoiners on the survey base map. Field observations and measurements will be taken and boundary evidence will be observed. Based upon all evidence a boundary determination will be made. The boundary survey will be integrated into the survey base mapping and will include boundary lines necessary to prepare legal descriptions for temporary construction easements (TCEs) and right of way takes if needed. Existing right-of-way documentation will be provided by Caltrans, AUTHORITY or SR4BPA and utilized to determine the existing right-of-way limits. Our scope assumes securing preliminary title reports for 4 parcels: North and southeast interchange quadrants, Kinder Morgan pump station relinquishment, and the SR 4 highway easement (with Kinder Morgan contamination). It is assumed that the Los Vaqueros Pipeline operated by Contra Costa Water District will process the relinquishment of their pipeline easements that are no longer needed and be responsible for obtaining all rights needed for their associated relocation. QEI assumes the following property owner involvements shown in the below table will be required for this scope of work:

APN/Parcel Description	Fee Takes	TCE's	Easements (Utility or Roadway)	Relinquishment	Description
010-020-051			1		Easement for tower relocation
019-150-15			1	1	Initially would be part of the Roadway Easement; then a Relinquishment
019-150-63			1		Easement for telecom
019-150-75		1	1		Easement for tower relocation Easement for construction (temporary)
HWY 4 BYPASS Right of Way	1		1		Fee take for Kinder Morgan Easement for roadway over existing Kinder Morgan parcel and plume
Totals	1	1	5	1	

QEI will prepare a right-of-way exhibit map to show current information regarding parcel ownership and right-of-way boundaries within the project limits.

After identification of the right-of-way boundaries and parcels affected, title reports will be acquired for each parcel. Upon review of each title report, QEI will prepare a ready-to-record Record of Survey map showing the alignment and associated right-of-way for the proposed improvements. Plats and legal descriptions for each parcel requiring acquisition will be prepared by QEI along with associated construction easements. QEI will prepare a Caltrans appraisal and right of way maps for review and approval.

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Task 002 - Right-of-Way Appraisal

Associated Right of Way Services (ARWS) will provide appraisals, and acquisition services for the Project. All AR/WS services will comply with pertinent sections of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Their services are based on the following assumptions:

- There are five appraisals and four property negotiations
- Property acquisition is to be conducted in conformance with a Caltrans related project
- There are no lessees interests to be acquired or cleared
- Property rights include fee simple, permanent and temporary easements
- There are no building improvements impacted on any of the properties
- If it is determined the Kinder Morgan Pump Station will be a “functional replacement” additional budget may be required
- AUTHORITY proposes to acquire the fee simple interest of the existing Kinder Morgan Pump Station. AR/WS to appraise existing site which is assumed to contain hazardous waste.
- Kinder Morgan to relocate pump station to a new site currently under the ownership of AUTHORITY. AR/WS to appraise new site
- One hole of the golf course will be temporarily impacted. However this hole will be modified and remain open and our understanding is that any impacts associated with the golf course will be handled as a separate project by the Contra Costa Water District.
- There are no significant severance damages as a result of the proposed acquisitions or as a result of project construction.

Appraisal and Appraisal Review

Appraisals to be provided as one original with two copies addressed and delivered to AUTHORITY. Appraisals are required from up to five properties. There are no significant severance damages issues. Appraisals to be prepared in accordance with California Eminent Domain Law, California Government Code Section 7260 et seq., Uniform Standards of Professional Appraisal Practice requirements, except as jurisdictionally exempt, and the Caltrans Right of Way Manual, and 49 CFR, Part 24.

The owner or a designated representative will be invited by the appraiser to accompany him/her during the inspection of the property. AR/WS will prepare appraisal reports in a Summary Appraisal Report format in accordance with Uniform Standards of Professional Appraisal Practice, Standard Rule 2-2 (b). The appraisal reports will be completed within approximately 6 - 8 weeks upon receipt of AUTHORITY’s written authorization to proceed, adequate appraisal maps, preliminary title reports, and design plans.

AR/WS appraisal will be for the “Fair Market Value” of the property as per California Code of Civil Procedure, Section 1263.320. The appraiser will issue the necessary public acquisition informational brochure to all owners. The market value of the property taken will not include any increase or decrease in the value of the property that is attributable to any of the following:

- The project for which the property is taken;
- The eminent domain proceeding in which the property is taken;
- Any preliminary actions of the acquiring authority relating to the taking of the property.

The Appraiser will not give consideration to, nor include in their appraisals, any allowance for relocation benefits of personal property. The appraiser will work directly with the Review Appraiser. The appraisal of real estate does not include business or goodwill analyses or conclusions. Any loss of goodwill valuations should be performed by others under direct contract to AUTHORITY.

Optional Services

- If revisions are made to the property requirements during the appraisal process or upon completion of the report appraisal time to address these revisions will be billed on an hourly basis in accordance with the AR/WS Fee Schedule.
- Expert witness related services including preparation for and appearances at depositions, court, arbitrations / mediations, hearings, and testimony will be billed on an hourly basis in accordance with the AR/WS Fee Schedule.
- If properties are split or added, additional appraisal reports may be required.
- Updated values when requested

APPRAISAL REVIEW

Appraisal review required and to be performed by others under subcontractor agreement. AR/WS proposes to subcontract with a qualified independent review appraiser for these services. Upon receiving appraisal reports, an office review of the reports using the various standards prescribed by the Federal and State Uniform Acts, Federal Highway Administration, Caltrans appraisal procedures, Uniform Standards of Professional Appraisal Practice (USPAP) and the California Eminent Domain codes will be completed. A checklist identifying the various requirements of the appraisal reports will be used to ensure that the reports contain all of the prescribed requirements. Review appraiser will prepare a summary of the appraisal process and provide comments regarding any omissions or problems with the reports, such as lack of reasonable support for the appraisal conclusions. Review appraiser will make initial call to the appraiser to inform the appraiser that the reports are being reviewed. Comments will be provided to the appraiser for discussion. A field review will be scheduled and if needed a meeting with the appraiser will be held and communicate with the AUTHORITY to clarify potential issues, resolve problems and notify AUTHORITY of progress.

If required by AUTHORITY, review comments will be provided to AUTHORITY at the same time they are sent to the appraiser. Upon satisfactory completion of the appraisal reports, a review certificate report will be prepared.

Task 003 - Right-of-Way Acquisition

AR/WS will prepare acquisition documents. Said documents include, but are not limited to, offer letter, summary statement pertaining to the acquisition of real property or an interest therein, purchase agreement, deed, public acquisition brochure and goodwill information sheet (if not addressed in AUTHORITY brochure), per Section 102 of the California Streets and Highways code appraisal reports will be provided to the property owners. AR/WS will negotiate to acquire property rights from up to four property owners. It is assumed there are no lessee interests which will need to be cleared.

All acquisition documents to receive AUTHORITY's written approval as to form prior to use in the field. If agreement with all owners and other required interests cannot be reached, AR/WS will advise AUTHORITY that negotiations have reached an impasse. The AUTHORITY will consider scheduling of an action in eminent domain including the required public necessity hearing. Our understanding is that any condemnation process would be handled by Contra Costa

County staff and acted upon by Contra Costa County Board of Supervisors. AR/WS will provide condemnation support as needed and requested, budget allowing. AR/WS will initiate and maintain individual acquisition files.

If settlement with owners is reached pursuant to the Client approved appraisal or AUTHORITY approved administrative settlement, AR/WS will prepare a Memorandum of Settlement for transmittal to Client. If an administrative settlement appears to be prudent, AR/WS will prepare a settlement discussion memorandum reviewing the issues. This memorandum will require AUTHORITY written approval before implementation of any settlement agreement. AR/WS will establish with Client a process of coordinating escrow closings and reviewing escrow instructions. Where there are escrow closings, preparation of escrow instructions will be completed by title company and escrow fees will be paid by the AUTHORITY. Approval of conditions of title and escrow instructions, including but not limited to, "subject to" title exceptions, will be done by AUTHORITY. All discussions for the acquisition of property or an interest therein will be directed to result in the payment of just compensation.

AR/WS will make every reasonable effort to acquire property on behalf of the AUTHORITY expeditiously through agreement with its owner and to avoid litigation. This may necessitate greater levels of effort in the negotiations phase and, where appropriate, should continue after eminent domain has been initiated. AUTHORITY will provide ongoing feedback to AR/WS as to authorization for settlements.

CLIENT OBLIGATIONS (ACQUISITION)

- Written approval of all acquisition documents.
- Direction as to administrative settlements, negotiating authority and condition of title acceptance.
- Providing any formats to be used by AR/WS on Client's behalf.
- Selection of Title Company.
- Review and approval of Title Company prepared escrow instructions including acceptable condition of title.

ADDITIONAL WORK

AR/WS will provide court and/or appeals related services, including but not limited to depositions, court appearances, arbitrations / mediations, hearings, testimony, and preparation for such activities, in connection with any service provided to the Client. These services, if requested, are not included in the AR/WS Budget Estimate and would be billed at the applicable current AR/WS hourly rate in accordance with the Fee Schedule.

Task 004 - Right-of-Way Certification

QEI and AR/WS will prepare the Right-of-Way Certification for advertising the construction contract. Upon completion of the Right-of-Way Certification documents resulting from the right-of-way acquisition process and the utility relocation process, the project can be advertised.

Deliverables:

- **Record of Survey for Proposed Right-of-Way**
- **Parcel Plats and Legal Descriptions (7)**
- **Caltrans Appraisal Maps**
- **Caltrans Right-of-Way Maps**
- **Right-of-Way Appraisals and Acquisition Contracts**
- **Right-of-Way Certification**

PHASE 1300 - Utility Relocation Coordination

Utility Conflict Identification: QEI will review the existing utilities as they relate to the proposed project and determine the extent of utility conflicts throughout the project area. QEI will also make a determination of liability for utilities that must be removed or relocated. This determination will include consideration of prior rights, public or private ownership, relocation options, and financial responsibility. A "Report of Investigation" (ROI) will be prepared to document each agency's liability for relocation costs.

Utility 'B' Plans: Based on the information collected from the Utility 'A' letters, QEI will prepare and send Utility 'B' packages to affected utility companies. The 'B' package, which will document identified utility conflicts and the conclusions from associated utility meetings, will include the following: 'B' Plans and a AUTHORITY-approved letter notifying the utility companies of conflicts between existing utility facilities and the proposed work. The letter will ask the utility companies to verify the conflict and notify them of the need to relocate their facilities. After receipt of the relocation designs from the utility companies, QEI will add the relocations to the drawings prior to the 95% design submittal.

Potholing: Where high risk utilities are located in the vicinity of proposed excavations and adequate horizontal and/or vertical information is not available, QEI will coordinate the potholing of these utilities with our sub consultant Subtronic and has included the potholing effort as part of this scope. This scope assumes a maximum of 10 potholes for the duration of the project. Upon completion of potholing, pot holes will be field located by QEI. Horizontal and vertical locations for all potholes will be provided for incorporation into utility mapping.

Utility 'C' Plans: QEI will send a copy of the 'C' Final Plans and a AUTHORITY-approved letter to the utility companies when the project is advertised for bids. The letter will include the project schedule and deadlines for completion of utility company relocation work.

Utility Agreements: For utility relocation within Caltrans right-of-way, QEI will coordinate the encroachment permit between the utility owners and Caltrans, the City and/or the County as needed.

Utility Certification: Upon completion of the plans, QEI will coordinate, process, and finalize the Project Engineer's Certification of Utility Facilities Form.

Deliverables:

- **Utility B Package**
- **Utility C Package**
- **Utility Report of Investigations**
- **Utility Agreements**
- **Utility Certification**

PHASE 1400 - Bidding Assistance & Award Recommendation

QEI will prepare a construction schedule to estimate the number of working days to be included in the construction contract. The schedule will be done using Microsoft Project, unless the AUTHORITY prefers another format. The schedule will also be provided to the Resident Engineer for their use during construction.

QEI will provide assistance, as directed by the AUTHORITY, in the advertising of the project. While the project is being advertised for bids, all questions concerning the intent shall be referred to QEI for resolution. In the event that any items requiring interpretation in the drawings or

specifications are discovered during the bidding period, said items shall be analyzed by the QEI team for decision by the AUTHORITY as to the proper procedure required.

Corrective action taken will either be in the form of an addendum prepared by QEI, or by a covering change order after the award of the construction contract.

QEI will assist the AUTHORITY in responding to bidders' inquiries, preparing addenda, clarifications, attending pre-bid meetings and bid openings, providing ongoing consultation and interpretation of the construction documents.

QEI will review the bid results and provide recommendations for awarding the contract.

Construction Support

QEI is available to assist the AUTHORITY during the construction phase. QEI can assist the Resident Engineer in order to minimize construction conflicts and to expedite project completion. QEI can provide services such as reviewing contractor submittals, preparing and/or reviewing change orders, and making other field observations, at the AUTHORITY's request. All of our activities include appropriate recommendations and documentation. QEI can prepare Record Drawings based upon the redlines submitted by the Contractor and Resident Engineer. Should these services be requested by AUTHORITY, a separate scope and fee proposal will be submitted on a time and materials basis.

If, during the construction phase of the project, a problem occurs which is directly caused by an error on the part of this QEI Team, we will remedy the situation at no cost to the AUTHORITY. QEI will furnish additional drawings for corrections and change orders required by errors or omissions of QEI at no additional cost to the AUTHORITY. If a problem occurs, which is not the fault of the Team and the AUTHORITY requests assistance, we will assist in the corrections to help remedy the problem. The original tracings of the drawings and contract wording for change orders shall be submitted to the CTA with the appropriate number of copies for distribution.

specifications are discovered during the bidding period, said items shall be analyzed by the QEI team for decision by the AUTHORITY as to the proper procedure required.

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QEI is available to assist the AUTHORITY during the construction phase. QEI can assist the Resident Engineer in order to minimize construction conflicts and to expedite project completion. QEI can provide services such as reviewing contractor submittals, preparing and/or reviewing change orders, and making other field observations, at the AUTHORITY's request. All of our activities include appropriate recommendations and documentation. QEI can prepare Record Drawings based upon the redlines submitted by the Contractor and Resident Engineer. Should these services be requested by AUTHORITY, a separate scope and fee proposal will be submitted on a time and materials basis.

If, during the construction phase of the project, a problem occurs which is directly caused by an error on the part of this QEI Team, we will remedy the situation at no cost to the AUTHORITY. QEI will furnish additional drawings for corrections and change orders required by errors or omissions of QEI at no additional cost to the AUTHORITY. If a problem occurs, which is not the fault of the Team and the AUTHORITY requests assistance, we will assist in the corrections to help remedy the problem. The original tracings of the drawings and contract wording for change orders shall be submitted to the CTA with the appropriate number of copies for distribution.

EXHIBIT D

2015 ECCRFFA STRATEGIC PLAN and CCTA MEASURE J FUNDING PLAN												
\$ thousands												
Year of Expenditure (YOE) Dollars												
APPROVED 11/12/2015												
		Prior Years	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	Future	TOTAL		
	REVENUE											
	ECCRFFA Fees Less Admin Costs (Revenue Projections based on base fee increases of SFR to Approx. \$17,649 plus escalation in 2017 and beyond)		\$12,005	\$13,103	\$14,301	\$14,587	\$14,879	\$15,176	\$151,000	\$235,082		
	(Measure J Revenues (East County Share))	\$43,600	\$200	\$2,100	\$8,000	\$0	\$0	\$0	\$54,345	\$108,445		

1) Balfour Road I/C - If CCTA is successful in securing a \$6M grant for the SR4 ICM project, \$2M of the Measure J funding will be transferred from Balfour Road I/C project to the SR4 ICM Project to act as a local match and \$2M in ECCRFFA funding will be transferred to the Balfour Road I/C project.

2) Balfour Road I/C - Any unexpended Measure J funds on SR4 East will first be used to address any eBART shortfall that may occur and second will be transferred to the Balfour Road I/C project, freeing up ECCRFFA funds, which will be reprogrammed to other ECCRFFA priority commitments/projects.